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ABSTRACT

Essays in applied linguistics presented in this annual review include: "Learner Autonomy: Some Steps in the Evolution of Theory and Practice" (David Little); "An Investigation of the Mental Lexicon of Second Language Learners" (Elizabeth O'Gorman); "Strategies for Identifying Terms in Specialised Texts" (Jennifer Pearson); "Inferencing and the Student of Translation" (John Kirby); "Citation as Persuasion in Research Articles" (Sarah Thomas, Thomas Hawes); "French Vocabulary--Looking for 'le mot juste'" (David L. Parris); "Electronic Texts and Concordances in the Translation Classroom" (Pearson); "The Noises Made by Poems: An Exploration of the Use of Poetry in the Advanced English Language Classroom" (Sarah Ekdawi); "Video in the Irish Language Classroom" (Nancy Stenson); "How Snowmen Move: Some Aspects of Lexical Choice in Irish Sign Language" (Patrick McDonnell); and "Extending the Lexicon of Irish Sign Language" (Patrick A. Matthews). (MSE)

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TEANGA 16

Bliainiris na Teangeolaíochta Feidhmí in Éirinn
The Irish Yearbook of Applied Linguistics

EAGARTHÓIR/*EDITOR: Dónall P. Ó Baoill*

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EAGARTHÓIR/*EDITOR: Dónall P. Ó Baoill*

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Is eagrán meascta é seo de chainteanna a tugadh ag seimineáir agus ag cruinnithe éagsúla de chuid IRAAL i rith na bliana. Tá aon alt déag ar fad san eagrán agus is as na páipéir a tugadh ag seimineár dar teideal **Lexicon and Vocabulary: Theory and Practice** agus a tionóladh i mí na Samhna seo caite a bhfurmhór. Foilsímid fosta an chaint a thug David Little ag an Chruinniú Cinn Bhliana 1995 chomh maith le cúpla alt eile a cuireadh chugainn. Gabhaimid ár mbuíochas le hInstitiúid Teangeolaíochta Éireann as clóchur a dhéanamh ar an ábhar ar inneal barrdheasc. Cuirtear TEANGA a fhoilsítear gach bliain, TEANGLITIR a fhoilsítear faoi dhó sa bhliain agus foilseacháin AILA ar fáil do bhaill IRAAL. Le tuilleadh eolais a fháil faoi bhallraíocht IRAAL, scríobh chuig: An Rúnaí, IRAAL, f/ch ITÉ, 31 Plás Mhic Liam, Baile Átha Cliath 2.

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Introduction

This issue contains a collection of talks given at various seminars and meetings held by IRAAL during the year. It contains eleven articles in all, the majority of which were delivered at a seminar held in November last entitled **Lexicon and Vocabulary: Theory and Practice.** We are also publishing the text of the talk given by David Little at the 1995 Annual General Meeting together with a few other submitted papers. We would like to extend our thanks to Institiúid Teangeolaíochta Éireann for providing us with desktop and typesetting facilities.

Members of IRAAL automatically receive TEANGA published yearly, TEANGLITIR published twice a year and AILA publications. For information regarding membership contact: The Secretary, IRAAL, c/o ITÉ, 31 Fitzwilliam Place, Dublin 2.

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Learner Autonomy: Some Steps in the Evolution of Theory and Practice[1]

David Little
Trinity College Dublin

Abstract

This article explores the concept of autonomy in second language learning by tracing some steps in the evolution of theory and practice. The first section relates Holec's (1979/1981) definition of learner autonomy to self-instruction in language learning, while the second section describes a successful attempt to promote autonomous learning in a school classroom. The third section then elaborates a theory of learner autonomy designed to apply equally to these two very different kinds of language learning. The fourth section describes how we are currently attempting to apply the theory to language learning projects in the Centre for Language and Communication Studies (CLCS), Trinity College, Dublin. Finally, the conclusion briefly suggests how the theory of learner autonomy might be further explored and elaborated.

Learner autonomy and self-instruction

In the report that he prepared for the Council of Europe under the title *Autonomy and foreign language learning*, Holec (1981: 3) defines learner autonomy as "the ability to take charge of one's learning", which means to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning, i.e.:

- *determining the objectives;*
- *defining the contents and progressions;*
- *selecting methods and techniques to be used;*
- *monitoring the procedure of acquisition properly speaking (rhythm, time, place, etc.);*
- *evaluating what has been acquired.*

This definition owes much to the work on adult education that the Council of Europe promoted in the 1970s; it also corresponds closely to the traditional image of the university student as someone capable of a high degree of self-direction in his or her learning. The terms in which it is couched seem to imply self-instruction and can easily encourage the view that learner autonomy is essentially a matter of learner maturity.

This interpretation of learner autonomy helped to shape the self-instructional German course that CLCS launched for students of Engineering in 1982. The course was extra-curricular and spanned two academic years. We knew from experience that students were not automatically autonomous in their learning, so besides self-instructional learning materials that they could use in our self-access centre, we provided them with an advisory service. We encouraged them to meet the advisor on a regular basis, either individually or in small groups, in order to discuss with her any problems they might be having with their learning; and the advisor did her best to engage them in processes of negotiation that would help them to accept responsibility for their learning.

There is no doubt that during the two-year research phase of this scheme the participating students learnt a lot of German; and there is no doubt either that for most of them the advisory service played an important role (for a full account of this research phase, see Little and Grant 1986). But it was clear to us that learning a language by individual self-instruction was a difficult undertaking, not only for motivational reasons but because self-instruction could not provide learners with the interaction and feedback that are inescapable features of classroom learning. Accordingly, from an early stage we gave our self-instructional learners the opportunity to take part in regular practice sessions with native speakers of German (mostly German students spending a term or a year at Trinity College). But despite this concession to interactivity, we still thought of the language learner as "a lone organism" (Bruner 1985: 25) whose success or failure was likely to depend on his or her maturity as a learner. That this was at best a partial view was made clear when we encountered autonomy as a reality of classroom language learning.

Learner autonomy in the classroom

Towards the end of the 1970s language teachers in Ireland as in other European countries became interested in communicative approaches to foreign language teaching. From 1979 Institiúid Teangeolaíochta Éireann provided a meeting place and administrative support for a group of language teachers who set out to explore the implications of these new approaches for foreign language teaching in Irish second-level schools. The ITÉ Modern Languages Project drew up guidelines for the elaboration of communicative syllabuses, developed communicative language teaching materials in French, German, Spanish and Italian, and provided regular in-service seminars for language teachers. In 1984 one of these seminars was given by Leni Dam, a Danish teacher of English.

Leni Dam's project was to foster the development of autonomy in Danish teenage learners of English. In her recently published book she explains her decision to go down this path as follows:

> In the mid 1970s I started for the first time to work with pupils of 14–16 years in unstreamed language classes. I was up against the tired-of-school attitude that this age group often displays, as well as a general lack of interest in English as a school subject. In order to survive I felt I had to change my usual teacher role. I tried to involve the pupils – or rather I forced them to be involved – in the decisions concerning, for example, the choice of classroom activities and learning materials. I soon realized that giving the learners a share of responsibility for planning and conducting teaching-learning activities caused them to be actively involved and led to better learning. It also increased their capacity to evaluate the learning process. In this way a virtuous circle was created: awareness of HOW to learn facilitates and influences WHAT is being learned and gives an improved insight into HOW to learn. (Dam 1995: 2)

Dam derived much of her initial inspiration from Douglas Barnes's book *From communication to curriculum* (1976). As its title suggests, this book explores the importance of communication for successful classroom learning, arguing that traditional modes of classroom organization generate forms of discourse that tend to suppress rather than stimulate the natural curiosity and interest on which learning depends. In the talk she gave to the ITÉ Modern Languages Project, Dam explained in detail how she made her learners confront the issue of their own interest and motivation, and how she required them to devise their own learning activities, find their own learning materials, keep a record of their learning in journals, and engage in regular evaluation of their own and others' progress. The account she gave of her pupils' projects and the samples she passed round of their work showed that learner autonomy could be a powerful reality in the classroom. But this autonomy was a very different phenomenon from the autonomy we had been trying to promote among self-instructional learners of German.

The ITÉ Modern Languages Project was in the vanguard of European development. Judged by what were then mainstream communicative criteria, *Salut!*, the three-year French course produced by the project, was as good as any. It concentrated from the beginning on encouraging learners to use French; it took very full account of their likely out-of-school interests and preoccupations; and it encouraged them to engage in various out-of-class activities likely to help consolidate their learning. But Leni Dam's talk was a salutary reminder that any course book is only as good as the interaction that converts it into a learning process. That was not all, however: her project demonstrated that if the interaction is right, there is no need for a course book in the first place. And in terms of communicative orthodoxy worse was to come: required to devise their own learning activities, Dam's pupils often gave themselves tasks that had been banned from orthodox communicative classrooms. It seemed somehow scandalous that pupils who spent so much of their time translating from Danish into English could perform so creditably in spoken English, even in their first year of learning. Again the conclusion was forced on us that it is not the task itself that determines learning success, but the kind and quality of the interaction in which it is embedded.

Leni Dam's 1984 seminar effectively undermined my two working assumptions about learner autonomy: first, that it was something likely to be achieved only by older and in that sense mature learners; and second, that it was achieved by individual learners operating as "lone organisms". Leni Dam's project demonstrated that young teenagers can show great maturity in matters of learning, and her experience implied that in principle there are no age-related barriers to learner autonomy. She also showed that in classrooms learner autonomy grows out of collaboration, so that acceptance of responsibility for one's own learning entails sharing responsibility for the learning of others.

Dam's practical demonstration of the essential paradox of learner autonomy in the classroom – that the development of a capacity for independent thought and action arises most effectively from pedagogical processes that emphasize interdependence and collaboration in learning – suggested the need for a theory of learner autonomy based on the resolution of that paradox.

The search for theoretical foundations

Arguments in favour of learner-centred pedagogies have often emphasized the gulf that easily separates developmental and experiential learning, at which human beings are notoriously good, from learning that takes place in the formal context of schooling, where success is by no means guaranteed. Barnes, for example, draws a crucial distinction between "school knowledge" and "action knowledge":

> School knowledge is the knowledge which someone else presents to us. We partly grasp it, enough to answer the teacher's questions, to do exercises, or to answer examination questions, but it remains someone else's knowledge, not ours. If we never use this knowledge we probably forget it. In so far as we use knowledge for our own purposes however we begin to incorporate it into our view of the world, and to use parts of it to cope with the exigencies of living. Once the knowledge becomes incorporated into that view of the world on which our actions are based I would say that it has become "action knowledge". (Barnes 1976: 81)

According to this view developmental learning – otherwise, the early growth of "action knowledge" – should play a central role in any theory of learner autonomy. After all, the outcome of developmental learning is autonomy, in the sense that it enables the child to operate independently across a range of domestic and social contexts. However, the growth of this autonomy, whether in speech or in behaviour generally, requires not only the constant stimulus of interaction with others, but also guidance and supervision. Children acquire their mother tongue by gradually reconstructing its forms from the input they receive from "expert" speakers; and it is clear that this process is largely resistant to interference from outside – children get their verb endings right, for example, when they are developmentally ready to do so, and not when their parents decide they should. But this fact must not mislead us into supposing that developmental learning is entirely free of quasi-pedagogical control. On the contrary, as Premack has observed (1984: 33; cit. Moll 1990: 1), the *"presence of pedagogy in human affairs introduces a cognitive gap that is not found in other animals. If the adult does not take the child in tow, making him the object of pedagogy, the child will never become an adult (in competence)".*

The implication of Barnes's distinction between "school knowledge" and "action knowledge" seems to be that we can overcome the problems of schooling by organizing our classrooms in such a way that they automatically encourage the kinds of discourse that by now are well understood to foster developmental learning. I believe this is true, as far as it goes. But we must be careful not to overlook two important facts. First, child-rearing practices differ greatly from one society to another, and with them the discourse structures by which developmental learning is mediated. Second, some parents, siblings and caregivers are better teachers than others, both in an absolute sense and in relation to the norms and expectations of the society of which they are members. For example, in a longitudinal study of mother tongue development in a group of English children, Wells found that the value attached to literacy in the child's early experience is a strong indicator of subsequent educational success (1981: 259); and he also found that the best predictor of attainment in literacy is the "extent of children's own understanding of the purposes and mechanics of literacy" when they start school (ibid.: 263).

If we are to derive our notion of what constitutes best pedagogical practice from the interactional structures that mediate developmental learning, then, we must not only take account of differences in child-rearing practice from one society to another: we must also identify what it is in child–"expert" interaction that enables the child to achieve autonomy in task performance. An approach to child development that helps us to do this is the one inspired by the work of the Soviet psychologist Vygotsky. Vygotsky insisted on the importance of the social factor in learning, but not in the superficial sense that most learning goes on within a framework of social interaction. He claimed that our higher psychological functions are internalized from social interaction:

> *Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category and then within the child as an intrapsychological category. (Vygotsky 1981: 163; cit. Wertsch 1985: 11)*

Vygotsky developed his theory of the "zone of proximal development" in order to explain how we arrange the environment so as to make it possible for the child to progress from one level of development to the next. He defined the "zone of proximal development" as the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky 1978: 86)

So what is it that enables the child to become autonomous in the performance of a particular task? Certainly, he or she must have passed successfully through the "zone of proximal development". But Vygotsky's insistence on the interactive nature of learning leads us to expect that the parent, sibling or caregiver also has a crucial role to play. And sure enough, Diáz, Neal and Amaya-Williams (1990: 151), in an exploration of the social origins of self-regulation, found that *"the relinquishing factor, as a true index of maternal sensitive withdrawal during the teaching task, was significant and positively correlated to the child's takeover of the regulatory role"*. In other words, the most skilful parent, sibling or caregiver is the one who knows exactly when to hand over control to the developing child.

Bruner provides an illustration of how this process can be transferred to more formal pedagogical contexts in the following description of the effective tutoring of young children:

> To begin with, it was [the tutor] who controlled the focus of attention. It was she who, by slow and often dramatized presentation, demonstrated the task to be possible. She was the one with a monopoly on foresight. She kept the segments of the task on which the child worked to a size and complexity appropriate to the child's powers. She set things up in such a way that the child could *recognize* a solution and perform it later even though the child could neither do it on his own nor follow the solution when it was simply *told* to him. In this respect, she made capital out of the "zone" that exists between what people can recognize or comprehend when present before them, and what they can generate on their own [...]. In general what the tutor *did* was what the child could *not* do. For the rest, she made things such that the child could do *with* her what he plainly could not do *without* her. And as the tutoring proceeded, the child took over from her parts of the task that he was not able to do at first but, with mastery, became consciously able to do under his own control. And she gladly handed these over. (Bruner 1986: 75f.)

Note that in this account the gradual handing over of control to the learner – in other words, the deliberate fostering of learner autonomy – is not an option that the tutor may or may not adopt according to ideological preference: it is essential to the success of the tutoring process. Note also that the handing over of control to the learner is more than a psychological phenomenon. In order to gain the psychological benefits of successful learning, the learner must gradually assume control of the social interaction that gives outward form and substance to the learning process.

Tharp and Gallimore (1988) provide a full account of the theoretical foundation and practical application of a pedagogy derived from the Vygotskyan model of child development and closely related to the pedagogy described by Bruner. In their project, primary school classes were divided into groups of five or six learners, which rotated around a number of different activity centres, one of which was controlled by the teacher. This procedure had two closely related benefits: it allowed the teacher to interact in a focussed, concentrated and appropriately supportive way with five or six learners at a time, and it required those learners who were not working with the teacher to discover how to conduct learning conversations among themselves, supporting one another in the "zone of proximal development".

So far I have been concerned with learning in general. I conclude this part of the article by briefly addressing the particular case of second language learning. There is by now a large body of research focussed on the processes of language learning, on the basis of which it is possible to make the following two generalizations:

1. Proficiency in the spontaneous oral use of a second or foreign language is developed by practice: we learn to speak our target language by speaking it. Assuming that spontaneous oral proficiency is part of what our learners are aiming at, we should do our best to ensure that they have every opportunity to speak their target language. The essential first step in this direction is to make the target language the usual medium of classroom communication. The pedagogy elaborated and explored by Tharp and Gallimore and the closely similar pedagogy practised by Leni Dam (see Dam 1995) are very precisely calculated to serve this purpose, since they assign a central role to collaborative work in small groups, where learning can proceed only via communication.

   On the other hand, language teaching in formal educational contexts has always used processes of explicit linguistic analysis as a means of compensating for the limited exposure that learners have to the target language. One of the chief products of linguistic analysis is, of course, conscious metalinguistic knowledge; and it is clear that conscious metalinguistic knowledge can support both the development of proficiency (for example, in the systematic learning of vocabulary) and target language use (for example, in the analysis of grammatical forms as an aid to reading comprehension, or the intentional deployment of various strategies in the performance of non-immediate communicative tasks).

2. The first of these generalizations tends to emphasize the social dimension of language learning, while the second tends to emphasize the psychological dimension – in pedagogical practice, of course, the two dimensions constantly interact with one another, so that it is often difficult to maintain a clear distinction between them. In order to complete the Vygotskyan picture, however, we need a third generalization.

3. The goal of all learning is that the learner should acquire knowledge and/or skills that he or she can deploy independently of the immediate context of learning. In other words, the true measure of success in learning of any kind is the extent to which the learner achieves autonomy. But what exactly is the complex of knowledge and skills that a successful language learner should be able to deploy? Taken together, my first two generalizations claim that language learning depends on the interaction of language use and linguistic analysis. Equally, however, language use – especially second language use – depends on the capacity for further learning; for it is on the basis of such a capacity that the language user is able to cope with unfamiliar situations and new discourse types. Thus we must always think of learner autonomy in relation both to learning and using the target language. If the teacher's task is to support learners in the "zone of proximal development", at every stage of the learning process we must think of the zone – and the gradual relinquishing of control to the learner – simultaneously and equally in terms of the skills and knowledge that underpin language learning and the skills and knowledge that underpin language use.

From theory to practice

I turn now to the recent application of these theoretical considerations to CLCS's practical involvement in language teaching and learning. I shall refer first to the two-year modules in French (non-beginners) and German (beginners and non-beginners) that we provide for students who are not taking a foreign language as part of their degree course, and then to our project to develop interactive video programs for use in self-access language learning.

The design of the French and German modules was shaped by one consideration above all: if when they had completed the modules our students were not able to use French or German for a range of communicative purposes corresponding to their personal (including academic and/or vocational) needs, they would have wasted their time. Communicative autonomy in the real world must be our overriding goal. Accordingly, we decided that the beginners' modules in German would begin by focussing on the practical demands of survival in a German-speaking environment, such as basic greetings and social interactions, travel, obtaining food and drink, and finding accommodation, and would gradually progress towards dealing with bureaucracy and taking an interest in cultural issues and current affairs. And we decided that the non-beginners' modules in French and German would move through three phases: (i) consolidation of basic communicative skills for everyday survival and social needs; (ii) refinement of expressive and interactive skills for effective involvement in social and study environments abroad; and (iii) development of spoken and written discursive skills and extended listening skills for the purposes of study abroad.

What pedagogical measures are most likely to help our students to become autonomous users of their target language? Our answer to this question has been constrained by two factors. First, each module is assigned only one two-hour session per week, which means that contact time between teachers and learners is strictly limited. Second, because our budget is not large, each module is open to a maximum of forty students, which means that the possibility of interaction between teachers and small groups of learners is also strictly limited.

These constraints have led us to pursue the development of learner autonomy in two largely unrelated ways. On the one hand, at the beginning of each module we spend a session talking to participants about the process of language learning and suggesting a number of practical measures that they might adopt in order to take control of their learning. On the other hand, we insist that French or German is the medium of all classroom communication, and the teachers are supported by teams of French- and German-speaking ERASMUS students: in each weekly session the learners spend half an hour working in groups of three or four with a native-speaker assistant. The purpose of this group work is to prepare interactive group oral presentations for assessment at the end of the year, and for much of the academic year it forms the core of the weekly sessions. Without necessarily reflecting on the fact, learners quickly find that they have to develop a high degree of autonomy as users of their target language if they are to participate fully in the work of their group; and the fact that the groups prepare presentations for assessment at the end of the module means that in order to succeed in the exams, students must support one another in the learning process.

Clearly, if students are to derive maximum benefit from the language modules they must spend more time on their language learning than the weekly two-hour sessions. The group work that leads to interactive group presentations in itself ensures that they collaborate with one another outside the weekly sessions. In addition, they are encouraged to use CLCS's self-access language learning facilities – language laboratory, video, satellite television, and a computer network with CD-ROM. I believe it is in the further elaboration of self-access support for the modules that we can make most progress towards the more effective development of autonomy in our learners. I can best illustrate this by referring to our work in interactive video.

The first version of the Autotutor, CLCS's interactive video cassette system, was designed and implemented over ten years ago (see Little and Davis 1986). Video was at that time a relatively new resource, and we were looking for ways of making it available to self-access learners. One option was to prepare worksheets that would provide learners with a viewing focus, comprehension exercises, and background information. An alternative was to link the videocassette player to a computer and replace the worksheets by a simple computer program. That, in essence, was what the Autotutor was designed to do.

From the beginning, however, we were compelled to recognize a potential conflict between what we could achieve with the Autotutor and our interest in promoting learner autonomy. This potential conflict is best described in discourse terms. I referred earlier to Barnes's (1976) argument that whereas learning is the product of communication, traditional modes of classroom organization generate forms of discourse that tend to suppress rather than stimulate the natural curiosity and interest on which learning depends. Specifically, traditional classroom discourse ensures that the initiative always lies with the teacher, and that learners are limited to a responding role (see Sinclair and Coulthard 1975). The same structure inescapably characterizes instructional computer programs: the computer (more accurately, of course, the teacher-programmer) takes the initiative and the learner must respond. What is more, unintelligent programs are capable of only very limited flexibility in the way they handle learner responses; in this they compare very unfavourably with even the most traditional and authoritarian human teachers.

In our earliest work with the Autotutor we tried to design our programs so as to give learners genuine choices, for example, in the order in which they performed exercises; and we also tried to structure exercises so as to encourage reflection on the part of the learner. The original version of the Autotutor was based on the Acorn BBC computer, which by the late 1980s was obsolete. This led us to develop a second version, Autotutor II, based on the PC. By the time we were in a position to implement this second version we were convinced of the importance of interaction and collaboration in the development of learner autonomy. Accordingly, we undertook a number of pilot projects designed to explore the use of Autotutor II as a stimulus for group work in self-access (for a fuller account of this work, see Little 1994). Programs followed much the same structure as before, but now they contained screens addressed to the group of learners and calculated to help them embed the running of the Autotutor program in a larger learning conversation (for more details, again see Little 1994). A number of pilot projects have produced highly encouraging results, so we are now embarking on the development of Autotutor programs as fully integrated self-access components of our foreign language modules. Our intention is to write programs that will facilitate target language interaction among three or four learners at a time, but will simultaneously encourage the adoption of an analytical perspective on both the content and structure of the individual Autotutor program and the larger language learning process. In this way we hope to take the first steps towards fostering learner autonomy via group work in self-access. In principle, of course, the same techniques can be applied to the use of audio and video in their own right as well as to other computer programs, so that whatever success we have with our Autotutor programs will be transferrable to other self-access facilities.

Conclusion: the never ending interaction between theory and practice

In this article I have tried to show how an essentially practical interest in learner autonomy generated the urge to explore theoretical perspectives, which in turn have provided tools with which to shape further pedagogical practice. The process is, of course, never ending. CLCS's pursuit of learner autonomy within the framework of our foreign language modules requires empirical investigation, and the results of that investigation will lead to further elaboration, and perhaps modification, of our theoretical position. Our immediate research agenda is already implied in what I have said about the next stage of the Autotutor project. We have derived detailed program design criteria from the three generalizations with which I concluded the theoretical part of this article; we shall write programs that explicitly combine language use (target language interaction) with language learning (the analytical, metalinguistic dimension); we shall make video recordings of learners working with these programs and invite them to introspect on the recordings; and we shall analyse these research data from various points of view. In this way we hope to gain information that will enable us to improve the design of future Autotutor programs, find analogous ways of exploiting our other self-access facilities, bring us to a better understanding of the nature of "learning conversations" (Tharp and Gallimore 1988), and perhaps even suggest procedures for the conduct of language classes and the management of classroom discourse.

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[1] This article is an extended and more formal version of the talk I gave at the 1995 Annual General Meeting of IRAAL.

References

Barnes, D. (1976). *From communication to curriculum*. Harmondsworth, Penguin.

Bruner, J. (1985). Vygotsky: a historical and conceptual perspective. In J. V. Wertsch (ed.), *Culture, communication, and cognition: Vygotskian perspectives,* Cambridge, Cambridge University Press, 21–34.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, Mass., & London, Harvard University Press.

Dam, L. (1995). *Learner autonomy 3: from theory to classroom practice*. Dublin, Authentik.

Diáz, R. M., Neal, C. J., & Amaya-Williams, M. (1990). The social origins of self-regulation. In L. C. Moll (ed.), *Vygotsky and education. Instructional implications and applications of sociohistorical psychology*, Cambridge, Cambridge University Press, 127–154.

Holec, H. (1981). *Autonomy and foreign language learning*. Oxford, Pergamon. First published 1979, Strasbourg, Council of Europe.

Little, D. (1994). Interactive videocassette for self-access: a preliminary report on the implementation of Autotutor II. *Computers and education* 23(1/2), 165–170.

Little, D. & Davis, E. (1986). Interactive video for language learning: the Autotutor. *System* 14, 29–34.

Little, D. G. & Grant, A. J. (1986). Learning German without a teacher. Report on a self-instructional programme for undergraduate students of Engineering Science at Trinity College, Dublin, 1982–1984. CLCS Occasional Paper No.14. Dublin, Trinity College, Centre for Language and Communication Studies.

Moll, L. C. (1990). Introduction. In L. C. Moll (ed.), *Vygotsky and education. Instructional implications and applications of sociohistorical psychology*, Cambridge, Cambridge University Press, 1–27.

Sinclair, J. McH. & Coulthard, M. (1975). *Towards an analysis of discourse*. Oxford, Oxford University Press.

Tharp, R. G. & Gallimore, R. (1988). *Rousing minds to life. Teaching, learning, and schooling in social context*. Cambridge, Cambridge University Press.

Vygotsky, L. (1978). *Mind in society*. Cambridge, Mass., Harvard University Press.

Vygotsky, L. (1981). The genesis of higher mental functions. In J. V. Wertsch (ed.), *The concept of activity in Soviet psychology*, Armonk, N.Y., Sharpe.

Wells, G. (1981). *Learning through interaction: the study of language development*. Cambridge, Cambridge University Press.

Wertsch, J. V. (ed.) (1985). *Culture, communication, and cognition: Vygotskian perspectives*. Cambridge, Cambridge University Press.

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AN GÚM

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An Investigation of the Mental Lexicon of Second Language Learners[1]

Elizabeth O'Gorman

1. Introduction

> *Without grammar very little can be conveyed;*
> *without vocabulary nothing can be conveyed*
>
> Wilkins 1972

In Hong Kong, the current emphasis on teaching grammar may cause some teachers to overlook the crucial importance of teaching vocabulary. From a cursory examination of popular textbooks it might seem that vocabulary is unimportant. However, there seems to be a resurgence of interest in lexis. This may be linked to the impact of technology on research and the ease with which data can now be inputted into a corpus or analysed by a concordancer. As a result, it is likely that vocabulary will once again assume a stronger presence than it has been accorded in the past.

1.1 The mental lexicon

Knowing how vocabulary is stored in the mental lexicon is important. If an approximate model can be made of the storage and retrieval systems of the lexicon then the teaching and learning of vocabulary can be enhanced. Several metaphors for such a model have been suggested -

- a dictionary
- a thesaurus
- an encyclopedia
- a library
- a computer

Of these, the computer analogy seems the most appropriate. It conveys the notion of simultaneous access to a variety of sources of information about an individual word. A word's orthographic, phonological, grammatical and semantic properties can be stowed for instant retrieval.

Also, links can be created between various words which pertain to any and every of these features.

As there is no way of accessing the mental lexicon itself, these approximations of its structure are mainly hypothetical. The difficulty therefore, is ascertaining exactly what these links are and how they work. Slips of the tongue, error analysis, word association, malapropisms and introspection are a few of the research tools that have been used to reach it. Word association is the easiest and quickest way of collecting data and it has a long history of use in psychology with established norms. Therefore, it is often the method of choice in language research.

1.1.1 The native speaker's lexicon

Based on word association research, the consensus on the native speaker's lexicon is that it changes in structure from childhood to adulthood. At first the links between words are mainly phonological. Later strong semantic links become the norm. In adulthood, the native speaker's associative links between words are relatively stable with high correlation on repeated testing. Moreover, the responses on word association tests are strongly convergent with high frequencies of relatively few words accounting for all subjects' responses (Aitchison 1987). The question is, are these findings mirrored in the lexicons of non- native speakers?

1.1.2 The L2 learner's mental lexicon

How do second language learners store the vocabulary of their target language? Does the storage system of vocabulary differ in their L1 and L2 lexicons? If we can discover how the L2 lexicon is structured, insights may be revealed which help to understand how best it can be expanded. This is important not only for vocabulary learning but also for vocabulary teaching. As there has been comparatively little research in vocabulary, the methods of teaching vocabulary are not always founded on psycholinguistic principles but may rely on untested assumptions.

1.1.3 The relationship between the L1 and L2 mental lexicons

Several possible models exist for the structure of the language learner's mental lexicon.

- an undifferentiated mass of both L1 and L2 lexical items
- separate lexicons which develop individually, one for each language
- a combination of these two

This is not to imply that there is a single universal, unchanging model for all language learners. As a learner progresses through different levels of proficiency, a gradual change in the mental lexicon may occur. Another factor contributing to change in the lexicon is age[2]. Cummins and Swain (1986), in their work on linguistic interdependence, have proposed a concept of a universal language proficiency underlying L1 and L2. This has been labeled CUP (common underlying proficiency) and serves as a model for general language learning. They suggest that:

> *common cross-lingual proficiencies underlie the obviously different surface manifestations of each language and bilingual proficiency is represented by a dual ice-berg model*
> *Bilingualism in Education* (p. 82)

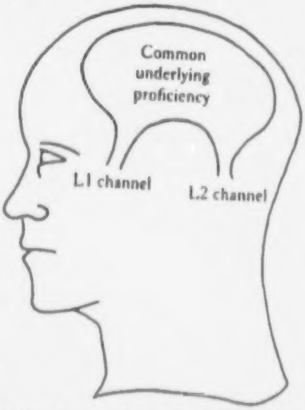


Figure 5.2 The common underlying proficiency model (CUP) of bilingual proficiency.

An extrapolation of this model suggests that while the surface features (the words in this instance) of two languages are obviously different, a common semantic space and similar links will underlie the vocabulary items of the L1 and L2. Evidence for this thesis would be finding similar links for the same semantic entries in the individual lexicons. That is, the word *table* would prompt the same association, e.g. *chair* in both the L1 and the L2.

1.2 Research questions

1. Do the responses on a word association test converge similarly in L1 and L2?
2. Are the associative links between words semantically similar in L1 and L2?
3. Are the prompt words which elicit high frequency responses similar in L1 and L2?

1.3 The nature of this investigation

The purpose of this investigation is to attempt to broaden the understanding of how the mental lexicon of the Hong Kong L2 learner is constructed. In particular, it seeks to compare the associations prompted by a single list of twenty frequent, basic, common words in the L1 (Chinese) and L2 (English). If the words give rise to similar associations, perhaps the notion of a single lexicon for both languages is appropriate. Knowing a word means being aware of the semantic space it occupies and does not occupy. The term word association can refer to either a psycholinguistical or sociolinguistical aspect of a word. In language research, it is usual to focus on the psycholinguistical interpretation: referring to the store of words and the interrelations between them (Carter 1987) rather than the more sociolinguistical interpretation which acknowledges the meanings that may be accrued from the social, cultural or pragmatic contexts. However, can these two aspects be separated?

In language research, the type of word associations a person makes can be classified into two main categories: phonological or semantic. Meara (1984) found that beginners and young language learners tended to make phonological links between words (*clang associations*). The type of semantic associations made can be subdivided into paradigmatic and syntagmatic responses. Here, paradigmatic usually refers to words from the same grammatical class and a similar semantic area. They may be coordinates, superordinates, synonyms or antonyms e.g. dog, cat, animal. By contrast syntagmatic refers to linked words which can be part of a syntactic (grammatical sequence) and therefore are collocates of the word, e.g. *dog, bark, furry*.

Traditionally, in the early research on word association, this differentiation within semantic associations was perceived as being important. It was found to distinguish between the responses of language learners at varying levels of proficiency. However, this distinction has been eschewed in this short study for the following reasons.

1. There are difficulties in classifying words into either category. There are fuzzy boundaries between them. (Is *chair* a syntagmatic or paradigmatic response to *table*? What about *queen* in relation to *king*?)

2. In this study, some of the responses were ambivalent in their relationship to the prompt word and possibly were errors (e.g. *length* as a response to *short*, *height* as a response to *long*). This necessitated the use of another category- 'misrepresentations' which distorted traditional analysis.

3. Moreover, the purpose in syntagmatic\paradigmatic research is usually to distinguish between learners of different proficiency levels. In this investigation, the subjects are at roughly the same level, all having achieved similar results on the college entrance criteria. Thus, the value of the distinction is not relevant.

4. Most importantly, while syntagmatic\paradigmatic research is usually INTRA-language, this study is concerned with INTER-language comparisons. As pointed out by Mitchell (1975) different collocations exist in different languages. Indeed, they exist in different varieties of the same language. For example the word 'soft' collocates with 'day' in Irish English[2] but not in the English spoken in England. Consequently, a comparison of syntagyms and paradigms in the word associations of any two languages will necessarily differ and be a feature of each language rather than a source of comparative proficiency data.

2 Method and problems

2.1 The investigation

The choice of method in investigations of the mental lexicon is limited to error analysis slips of the tongue introspection and word association. As a primary focus of the study is the variable associative links of L1 and L2, word association seemed the obvious choice of method. What follows is a comparison of a small number of language learners' L1 and L2 mental lexicons. It is primarily descriptive in nature and does not seek to generalize to any population. It focuses on the **written** word associations generated by oral prompts as this was the simplest way of collecting data. A similar study focusing on oral responses may produce somewhat different results.

2.1.1 Subjects

The subjects were a group of 22 students in their first year of a tertiary teacher training course. All were English electives and although all had similar results in the Hong Kong Certificate of Education Examination, the apparent range of their ability (as gleaned from classroom interaction) was quite diverse. However their scores, (excluding the two extremes), on the Goulden et al., (1990) vocabulary checklist were from a fairly narrow range - 4,300 - 6,500 and the mean score determining vocabulary size was 5,230. Other research on L2 vocabulary size indicated that Hong Kong secondary form two and form three students have vocabulary levels of approximately 1,263 and 1,565 (Cheung, 1992) and that Japanese proficient language learners have vocabulary levels of between 4,900 - 12,100 with a mean of 7,700. (Izawa, 1993). This suggests that the subjects come from a mid-proficiency range.

2.1.2 Method

A list of twenty English words from McNeill (1995), taken from the Kent-Rosanoff (1910) list was used as prompt words. This list was also translated into Chinese. On separate occasions each list was read out to the subjects. They were instructed to write down the first word that entered their mind on the provided worksheet. Due to outside factors beyond control, only 15 sets of responses were included in the Chinese survey and 16 in the English survey. Of these, the responses for 20 words were included in the English survey. In the Chinese survey one word *smooth* was translated ambiguously and elicited a different response from each of the subjects. Consequently, it was dropped from the analysis and only 19 words of the 20 were used.

2.1.3 Method of Comparing Chinese (L1) with English (L2)

Students heard the list of 20 prompt words in English and then in Chinese. The total possible number of responses for English was 320 [20 prompt words X 16 subjects] and the possible total number of responses for Chinese was 285 [19 prompt words X 15 students]. However, the actual total number of responses was distorted in both cases as one student gave two responses to three words and a few subjects did not write responses to every prompt words. This latter phenomenon occurred a little more frequently in English than in Chinese -10 times in English and 7 times in Chinese.

2.1.4 Analyses used

The responses produced by the word association test were analysed and the frequencies of different response words (types) were tallied for each language. This elicited the overall convergence and divergence of responses in L1 and L2 -the types token ratio. Following this, the responses for each word and for its translation were compared to determine which similar semantic prompts inspired different responses in L1 and L2 and which semantic prompts inspired similar responses in L1 and L2. Next, the high frequency responses in L1 and L2 were compared to see if any obvious relationship existed.

2.2 Problems with method

As Carter (1987) pointed out, word association research is limited. One to one translations of the stimulus word is difficult beyond a very basic level and even then the connotations of a word in any two languages is unlikely to be similar. Homographs and homophones cause problems, some peculiar to studies involving Chinese characters. The Chinese characters for light and bright are the same and take their meaning from the context without a context, as in simple word association, it is impossible to tell.

2.2.1 Problems with method

In translating words into Chinese, there is the additional problem of Cantonese being the oral version and Putonghua being the written version. Equally, retranslating the words back into English for the purposes of analysing them, leads to further distortion of the boundaries of the semantic space they occupy.

Additionally, assessing the links in the mental lexicon through the use of discrete vocabulary items is far removed from their normal contextualised usage. Thus, it may not be an accurate representation of the mental links. Equally, knowing a word includes knowledge not only of its semantic sense but also of the way it is used (its inflections, its derivations, its usage). Similar criticisms of this type of research have been put forward by Cowie (1984) among others who states there is a need to move away from purely psycholinguistic research strategies.

While a single word response is very limiting, in some respects, test retest correlations have proved high in past research (Postman and Keppel, 1970). A spew test would not necessarily have been more revealing and the additional information mainly repetitive, though perhaps having more validity.

3. Analyses

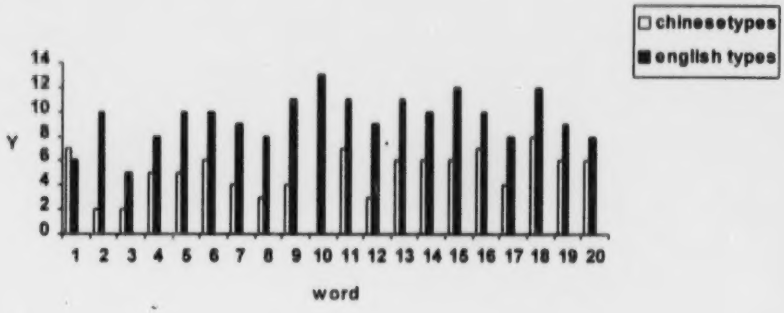
3.1 ***Research question 1:*** *Do the responses on a word association test converge similarly in L1 and L2? [Type token ratio.]*

3.1.1 Types per prompt word.

When the associations were analysed the overall trend noted was that the responses in Chinese tended to converge, whereas the responses in English tended to diverge. There was a marked similarity within the L1 responses and a contrasting disparity among the L2 responses.

The number of different words (the types) given in response to each prompt word in Chinese contrasted strongly with the number of words given in English.

Figure 1 Responses classified into number of types per prompt word.



3.1.2 Total number of types

The total number of types required to account for all the tokens (words given in response to a prompt word) offered by the subjects in Chinese contrasted strongly with the total number of types required to account for all the tokens given in English. This, in part, is accounted for by the fact that only 19 words and their associated responses are considered in Chinese whereas 20 words form the basis for analysis in English. This has the effect of distorting the data but the overall difference is so great that it seems to have only a slight impact.

Table 1: Type\Token ratio
Word types required to account for all tokens

	number of types	*total number of tokens*	*expressed as a ratio*
Chinese	96	316	.35
English	191	277	.60

Here only 96 types were needed to account for all responses in Chinese; in contrast, 191 words were needed to account for all the responses in English.

Prompt, responses and frequencies in L1 and L2

Table 1a: Analysis of Chinese prompts and responses

prompt	1st most common response		2nd most common response		3rd most common response	
1 table	chair	6	furniture	2	water	2
2 dark	light	14	night	1		
3 man	woman	13	strong	2		
4 deep	shallow	8	sea	3	light	2
5 soft	hard	6	near	6	cotton	1
6 mountain	water	5	trousers	5	dead	2
7 black	white	12	blackbird	1	dark	1
8 hand	foot	13	useful	1	skillful	1
9 short	long	12	inconvenient	1	length	1
10 smooth	X					
11 command	obey	4	order	3	army	1
12 woman	man	11	water	2	soft	1
13 cold	hot	6	snow	1	pure	1
14 slow	fast	7	quick	5	blind	1
15 white	black	8	pure	3	clean	1
16 needle	sharp	5	thread	3	cloth	2
17 girl	boy	9	lovely	3	mother	1
18 health	sick	5	wealth	1	happy	2
19 moon	sun	7	stars	2	romance	2
20 king	queen	8	rich	2	eunuch	2
		159				

Table 1b: Analysis of English prompts and responses

prompt	1st most common response		2nd most common response		3rd most common response	
1 table	chair	4	furniture	7	desk	2
2 dark	light	2	night	4	black	4
3 man	woman	5	strong	3	human	3
4 deep	dark	4	sea	3	shallow	3
5 soft	hard	5	light	1	sofa	2
6 mountain	hill	4	high	4	valley	1
7 black	colour	5	white	4	dark	2
8 hand	finger	5	body	4	foot	1
9 short	long	4	tall	2	length	1
10 smooth	rough	3	soft	2	river	1
11 command	order	6	request	2	sentence	1
12 woman	man	4	lady	4	water	1
13 cold	hot	3	winter	3	snow	1
14 slow	fast	5	relax	2	walk	1
15 white	snow	4	black	2	clean	1
16 needle	thread	4	sharper	3	clothes	1
17 girl	boy	5	young	4	lady	1
18 health	wealth	3	body	3	strong	1
19 moon	sun	3	night	3	romantic	2
20 king	queen	5	crown	2	emperor	3

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As there was a high number of types arising from single instances (i.e. only one subject gave that word in response to the prompt word [see Tables 1a and 1b]), a more representative picture can be gleaned by examining the high frequency responses of the L1 and L2 word associations.

3.1.3 The most frequent associations

Table 2: Comparison of the most common response in L1 and L2

	The most common response		
	number of types	number of tokens	expressed as a ratio
Chinese	19	159	.12
English	20	85	.23

From examining the the high frequency responses of Tables 1a and 1b, (the first column) it can be seen that the difference between the number of tokens accounted for by the most frequent responses in Chinese is virtually double that of those in English.

3.1.4 The first three most frequent associations.

A quick examination of the 1st three most common responses (Table 3) reveals that this trend is continued, though is not as strong.

Table 3: Comparison of the 3 most common responses in L1 and L2

	number of words	***number of tokens accounted for***	***expressed as a ratio***
Chinese	55	200	.27
English	60	179	.34

Here the three most common responses of each of the prompt words still accounted for a greater proportion of the total number of responses in Chinese than in English.

3.2 Discussion

These findings mirrored that of Meara (1982). In a study of the word associations of L1 and L2 speakers, Meara found that the responses differed greatly. Although the L2 speakers probably had smaller and more limited vocabularies than the native L1 speakers, they tended to produce a wide range of dissimilar responses to the prompt words. In comparison, the L1 speakers tended to reproduce a narrower range of similar responses. This would seem contrary to anticipated results - a smaller vocabulary should produce a smaller range of responses.

In this Hong Kong study of word associations there also was a difference between the responses generated by the mother tongue (Chinese) and the responses generated by the second language (English). The responses in L1 tended to converge so that the number of words accounting for the total range of responses was far less than the number of words accounting for the total range of responses in L2.

Meara postulates that this difference in the L1 and L2 mental lexicon is due to the L2 learners' lack of clearly established links between words. In L1 not only are these links strong, but they are also shared by many speakers. It is interesting to speculate why this is so. Perhaps the size of vocabulary is at issue here and the consequent necessity for an individual word in the L2 learner's lexicon to represent a larger area of semantic space [meaning] than it has to represent in the L1 (native speaker) lexicon.

3.3 ***Research question 2****: Are the associative links between words semantically similar in L1 and L2?*

Table 4: **Chinese/English word association responses**
English equivalents given for Chinese prompt words and responses
Underlined words are translations from Chinese.

word	1st most common response	number of occur-rences	2nd most common response		3rd most common response	
table	*chair*	*6*	*furniture*	*2*	*water*	*2*
	chair	4	furniture	7	desk	2
man	*woman*	*13*	*strong*	*2*		
	woman	5	strong	3	human	3
soft	*hard*	*6*	*near*	*6*	*cotton*	*1*
	hard	5	light	1	sofa	2
short	*long*	*12*	*inconvenient*	*1*	*length*	*1*
	long	4	tall	2	length	1
woman	*man*	*11*	*water*	*2*	*soft*	*1*
	man	4	lady	4	water	1
girl	*boy*	*9*	*lovely*	*3*	*mother*	*1*
7	boy	5	young	4	lady	1
moon	*sun*	*7*	*stars*	*2*	*romance*	*2*
	sun	3	night	3	romantic	2
king	*queen*	*8*	*rich*	*2*	*eunuch*	*2*
	queen	5	emperor	3	crown	2

A comparison of the responses for each individual word prompt was conducted to see if the responses were linked in any way. A CUP (common underlying proficiency) model of language skills would predict that a word in the L1 lexicon would have word associations similar to its counterpart word in the L2 lexicon. Similar sets of responses would also be anticipated if the lexicons of the L1 and L2 were an undifferentiated mass.

Here the focus was on whether the prompts would give rise to similar responses in both L1 and L2. As can be seen from Table 4 the responses in L1 and L2 are similar for less than half of the prompts. When the second and third most common responses are considered the similarity decreases to four out of a possible sixteen. It is interesting to speculate on the reasons for these few similarities that do exist in the data. Possibly some may be translations from the mother-tongue. Others may only exist from a foreign source, for example *king, emperor* is more common in Chinese. More may be explained by obvious contrast i.e. *man\woman, short\long.*

3.4 **Research question** 3: *Are the prompt words which elicit high frequency responses similar in L1 and L2?*

It was assumed that the words in a language which evoked a high frequency of similar responses were those that were well anchored in the mental lexicon and therefore had strong links shared by all speakers of the language. One tenet of L2 lexicon researchers is that as the L2 learner approached native speaker competency, word associations would mirror those of the L1. The analysis chosen to investigate this aspect was a comparison of the Chinese words which gave rise to the greatest convergence with the English words which gave rise to the most convergence.

Table 5: **Chinese word convergence**
English equivalent given for prompt word and response

word	**1st most common response**	**number of occur-rences**	**2nd most common response**		**3rd most common response**	
dark	light	14	night	1		
man	woman	13	strong	2		
hand	foot	13	useful	1	skillful	1
black	white	12	blackbird	1	dark	1
short	long	12	inconvenient	1	length	1
woman	man	11	water	2	soft	1

Table 6: **English word convergence**

word	1st most common response		2nd most common response		3rd most common response	
table	furniture	7	chair	4	desk	2
command	order	6	request	2	sentence	1
man	woman	5	strong	3	human	3
soft	hard	5	sofa	2	light	1
black	colour	5	white	4	dark	2
hand	finger	5	body	4	foot	1
slow	fast	5	relax	2	walk	1
girl	boy	5	young	4	lady	1
king	queen	5	emperor	3	crown	2

As can be seen only one of those words which elicited high frequency responses had common semantic responses. Reasons to account for these two might include: the word's high position on a general service word list (though it is not markedly higher than other words in the list of prompt words). It must follow then that convergence is not a factor in establishing a common semantic space for words in the L1 and L2 mental lexicon.

3.5 Discussion

A possible extrapolation of these findings is that a well anchored word (as established by the high frequency of similar associations from different subjects) may have completely different links in the L1 and L2 lexicons. Therefore, the concept of a single underlying proficiency for both L1 and L2 seems invalid with regard to the semantic space occupied by the Chinese and English lexicons of Hong Kong learners. The CUP model of language must be treated with great caution and the concept applied only to those areas where more evidence exists for its plausibility- for example, the various reading skills may transfer readily from L1 to L2.

This finding of prompt words with high frequency responses giving dissimilar semantic responses in L1 and L2 leads to questioning the notion and implications of response stability in L1 and L2. Traditionally it is thought that in L1 responses are stable and in L2 they are not. This is thought to be due to the underdevelopment of strong links between words in L2 and to the necessity for an individual word in the L2 learner's lexicon to represent a larger area of semantic space [meaning] than it has to represent in the L1 (native speaker) lexicon. However, in this study, the word associations for many L2 learners were shared but they were not similar to native speakers' word associations. This then, questions the idea that, as proficiency increases, the L2 learner's lexicon will mirror that of the L1 native speaker. Indeed, a further question is whether the L2 learner's lexicon will ever give rise to similar patterns of response.

From this study, an intermediate stage would appear to exist where well-anchored words share links peculiar to the L2 lexicon. Perhaps these links are formed during the learning process and are specific to each learning situation and possibly culture of the L2 learner.

3.5.1 Miscue analysis of responses

Several responses were unusual and seem to point to two sources of inaccuracy -mishearing and misrepresentation.

In common with the findings in Meara's Birbeck vocabulary project, a source of bizarre responses was a misunderstanding of the prompt word e.g. *dog* for *dark*; *help* for *health*; *comment* for *command*. These findings should be given due weight as they indicate a problem area for language learners - the identification of words in the target language. Although the words were simple and well within the competency of the learners, they misunderstood the stimulus word most frequently mistaking them for words which had a somewhat similar phonological resemblance. In many cases, the errors were based on the final syllable. Perhaps mother tongue interference can account for this - in Cantonese, most words end with a vowel sound and learners may have difficulty with English consonant endings both in oral production and aural comprehension. A similar finding was reported by McNeill (1990) in his analysis of Hong Kong students' English errors.

The other source of errors pointed to production difficulties. Here the problem may be that faulty links between underlying semantic space and the surface features of the L2 learners productive vocabulary caused them to write words, which did not accurately represent what they had intended. Such an explanation may account for such anomalies as *high* when *height* might have been a more appropriate response. Did the subject intend a different lexical item or did the possible derivations of a lemma get confused?

4. Conclusion

The results of this study suggest that the L1 and L2 lexicons of mid-proficiency Hong Kong language learners are very different in structure. The L1 and L2 prompt words neither provoke similar frequencies of responses nor do they evoke similar semantic associations in the L1 and

L2 lexicons and finally, individual word responses do not elicit similar frequencies of types in L1 and L2.

It seems reasonable to assume from these findings that different languages produce different storage and retrieval systems and the notion of a CUP iceberg model is not supported in this case. While it is highly likely that technical vocabulary evokes similar word associations other words have culturally-loaded associations. These cannot be ignored in discussions of word associations. The originators of the CUP model were mainly concerned with primary school classroom research rather than society and this may explain the narrowness of the applicability of their model.

4.1 Possible implications

Some tentative suggestions may arise from these findings. As the same prompt words in the two languages evoke quite different responses in L1 and L2, than using translation methods of teaching vocabulary may not be in the learners' best interests. Translation may be successful, giving instant access to an individuals words meaning. However, this is a shortsighted approach, as it prohibits the possibility of developing associations in the L2. Perhaps an alternative approach which focused on providing synonyms and antonyms in the L2 would help promote word links and would anchor the word more firmly in the L2. Also, as a native speaker's vocabulary is approximately 17,200 words (Goulden et al., 1990) and that of these mid-proficiency L2 subjects 5,230, it seems every opportunity ought be made to increase vocabulary size. By expanding vocabulary size, the semantic space allotted to each word in the L2 learner's lexicon may be decreased. This may strengthen the links between words as they may be more focused.

Given the problem of misrepresentation encountered in this study, the uncontextualised learning of vocabulary, as in the use of wordlists, may be indicated. The use of the newly combined dictionary and thesaurus, the 'language activator' may also be of use in this area.

4.1.1 Future research

Despite the limitations of word research cited, further investigation in this area should prove worthwhile in adding to the information on the L2 lexicon.

A similar study using Irish as the L2 is envisaged. In addition to a simple comparison of the English and Irish mental lexicons as in this study additional criteria will be considered such as the differences between the bilingual native Irish speaker and non native Irish speakers of varying proficiency such as Gaelscoil and ordinary primary school.

A statistical comparison with a sufficiently large group of high frequency responses in L1 and L2 would be of interest, as would a study determining whether or not vocabulary size is a factor in the production of high frequency responses.

If Irish word association norms based on the Kent- Rosenoff list are not currently available, an investigation yielding such norms would provide a useful comparative base for further interlanguage comparison.

Other research might involve the stability of L1 and L2 word association responses on a test retest survey. A comparison of aural prompts and oral responses with written prompts and written responses might be of particular interest in Ireland given the emphasis on audio-visual teaching in primary schools.

All told there remains a large area of unexplored vocabulary research which might add to the understanding of the L2 lexicon.

Footnotes

[1] This article is based on a study of English language learners in Hong Kong.

[2] Further issues to consider are whether the learner is a composite or compound bilingual and whether the second language contributes to additive or subtractive bilingualism but these are peripheral to this study.

[3] A soft day means a pleasant, not cold, day.

References

Aitchison, J. (1987). *Words in the mind: an introduction to the mental lexicon,* London Basil Blackwell.

Carter, R. (1987). *Vocabulary,* Oxford: O.U.P.

Carter, R. and McCarthy, M. (1988). *Vocabulary and Language teaching,* London: Longman.

Cowie, A. P. (1984). Stable and creative aspects of vocabulary use. In R. Carter and M. McCarthy (1988) *Vocabulary and Language teaching,* London: Longman.

Cheung, Y.C. (1986). *A study of the English vocabulary in junior Secondary Textbooks in Hong Kong,* Ed. Research Department, Ed. Dept. Hong Kong.

Cummins, J. and Swain, M. (1986). *Bilingualism in Education.*

Goulden, R., Nation, I.S.P. and Read, J. (1990). How large can a receptive vocabulary be? *Applied Linguistics,* 11(4), 341-363.

Izawa, H. (1993). The English vocabulary of 21 Japanese adults on a high proficiency level. *JALT* 15(1), 63-78.

Kent, G. H. and Rosanoff, A. J. (1910). Word association stimuli. In L. Postman and Keppel, J. (1970) *Norms of word association,* New York Academic Press.

McNeill, A. (1990). Vocabulary learning and teaching: Evidence from lexical errors in the spontaneous speech of ESL learners. *Institute of language in Education Journal* 7 (1990), 141-153.

McNeill, A. (1995). Unpublished "Lectures in Vocabulary", M.Ed. course, Hong Kong University.

Meara, P.M. (1982). Word associations in Foreign Language. Nottingham Linguistic Circular 11(2), 29-38 mentioned in R. Carter and M. McCarthy (1988) *Vocabulary and Language teaching,* London: Longman.

______ (1984). The study of Lexis. In A. Davies, C. Criper and A. Howatt (eds) *Interlanguage*, 225-35. Edinburgh University Press.

Mitchell, T. F. (1975). *Principles of Firthian linguistics.* Longman.

Postman, L. and Keppel, J. (1970) *Norms of word association,* New York Academic Press.

Wilkins, D. A. (1972) *Linguistics in language teaching,* Edward Arnold, London.

Strategies for identifying terms in specialised texts

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Introduction

The compilation of specialised glossaries is frequently an integral function of translation departments involved in the translation of specialised texts. Glossary compilation is a time-consuming undertaking whereby terminographers have to sift through large bodies of text in order to identify and retrieve terms and their equivalents in other languages. In the past and perhaps even still, much of this work was done manually.

The first step in the glossary compilation process is term identification. Terms are those words or phrases which are considered to form part of the special vocabulary of a particular subject domain. As the many articles devoted to the topic will testify, term identification is a lot less straightforward than one might imagine. The terminographer has to decide whether certain words or phrases should be considered as having special reference, and therefore terminological status, within a particular context or whether it is more sensible to consider them as part of general vocabulary. S/he also has to decide where the cut-off point for a multi-word term should be. For example, should the telecommunications term *amplitude companded single sideband modulation* be classified as a single term or as two or more separate terms? The terminographer generally relies on a combination of specific criteria and his/her own intuition to allow or eliminate term candidates. Specific criteria for inclusion will generally include the relative frequency of a word or phrase in a text.

Automatic identification of terms

As mentioned above, the automatic identification of terms has already engaged the minds of a number of researchers, primarily those working in information retrieval and natural language processing. The identification of terms in telecommunications texts is well documented, by Béatrice Daille (1994) in her PhD thesis on the topic, by researchers at Dublin City University and UMIST as part of the EU funded Eurotra research project.

Yang (1986) has devised a technique for identifying scientific and technical terms in a scientific English corpus. At the University of Surrey, work on terminology retrieval has been undertaken in a number of fields including automotive engineering and aeronautics. Jacquemin and Royaute (1994) have worked with the MEDIC corpus which is a bibliographical medical corpus. As these examples show, the research tends to be subject field specific which is not unreasonable given that term formation patterns may vary from one subject field to another.

Research has generally focused on examining term formation patterns which occur in corpora with a view to tagging the corpora and retrieving term candidates. Tagging involves assigning a predetermined set of word classes to all words in a corpus. Each word is identified as belonging to a certain part of speech. A number of different tag sets exists, and this author has used the tag set devised by the Corpus Linguistics Group at the University of Birmingham. In a preliminary phase, a manual analysis is carried out to identify the composition of terms in a corpus and a list is drawn up of all possible combinations. These combinations are then used as input to retrieve all term candidates. Nkwenti-Azeh (1992) attempted to identify potential terminological units using a positional and combinational approach. He found that:

> the positional approach .. removes the need to comprehensively mark up the terms of an input text, especially where we are dealing with a circumscribed corpus: terminological units occurring in the text can be reconstituted if the positions of their elements have been specified in the positional database. (1992:19)

Jacquemin and Royaute (1994) were in fact more interested in retrieving term variants than actual terms. They used an existing set of terms and an analysis of the head-modifier relations to establish whether other syntactic patterns containing the same head and modifier could be classified as a variant of a term contained in their list.

Yang used frequency and collocational patterns to identify terms. He states:

> Since terms are highly subject matter specific, it is possible to identify single-worded terms on the basis of their frequencies of occurrence and distribution. Multi-worded terms are identified on the basis of their collocational behaviour. (1986:93)

The problem with the criterion of frequency is that it excludes terms which occur only once or infrequently in a corpus. Daille (1994) combined morpho-syntactic and statistical approaches to extract term candidates. She focused exclusively on binary term formation patterns (e.g. adj+noun) in order to write a program for retrieving all such patterns from her corpus. Frequency was once again an important criterion for assessing the eligibility of a term candidate.

There is one not inconsiderable drawback to the term formation approaches outlined above. While the specification of term formation patterns will ensure that all candidates meeting the required specification will be considered as potential terms, it will also ensure the inclusion of many words or phrases which will prove to be non-terms. For example, if the pattern *adj+noun* has been specified as a term pattern, all occurrences of modified nouns, regardless of their status, will be included, resulting in the retrieval of a far greater set of potential terms than one would wish to have. For this reason, I decided to explore the possibility of applying an additional set of criteria which would refine the selection process and result in a more accurate list of term candidates.

The corpora which I used for my analysis are the ITU corpus (4.7m words) and the GCSE corpus (1m words). The ITU corpus is available on CD-ROM from the University of Edinburgh and comprises recommendations and specifications produced by the International Telecommunications Union for its members. The GCSE corpus, to which I have access via the COBUILD unit at the University of Birmingham, contains some of the GCSE syllabus for economics, biology and history.

Identifying term formation patterns

In the first phase, I produced a list of all possible term formation patterns in each of the corpora by examining the composition of words/phrases which I knew to be terms. I considered them to be terms because they co-occurred with certain hinges such as *denotes, is defined as, is called.* As term formation patterns tend to vary from one text type to another (i.e. complex terms are more common in texts where the author-reader relationship is one of expert to initiated reader), I decided that it would be more useful to analyse term formation patterns in each of the corpora separately. The corpora were tagged using the CLG tagger devised by the Corpus Linguistics Group at the University of Birmingham.

Term formation patterns in the ITU corpus

The list of term formation patterns in Table 1 contains those which were identified by examining all nouns and noun phrases which occurred with connective verbs such as *denotes, is defined as, is called.*

Table 1. Term formation patterns, ITU corpus

Term formation pattern	Term candidate
+det NN	a window
	a pointer
+det JJ NN	an effective call
+det NN NN	a test cycle
	the message group
+det JJ NN NN	a generic test suite
	a compound parameter name
+det JJ NN NNS	the low layer capabilities
+det NN IN NN	the plane of measurement
+det NN NN NN	the frame alignment procedure
	the TCAP message format
	a circuit multiplication system
+det VBN NN	a confirmed service
	the applied load
+det VBG NN	the magnifying optics
+det NN VBN NN	A position defined parameter
+det VB NN NN	The resynchronize type parameter
	The receive state variable
+det NN NN VBG NN	The data link resetting procedure[1]
-det NN	interworking
-det NN NN	envelope delay
-det NN NN NN	access control administration
-det JJ NN NN	direct parameter input
-det JJ NN NNS	analogue transfer links
-det JJ NN	arithmetic subtraction
	dynamic alignment
-det JJ NNS	functional entities
-det NN JJ	implementation dependent
-det VBN VBG	compelled signalling

As the examples show, terms can have up to four components but such terms will be rare and, in many instances, what appear to be 4-component terms are in reality either modified 3-component terms, or terms which have a generic class word such as *system, procedure* or *method* as the head word of the NP.

At first glance, a considerable number of the terms do not strike one as being particularly 'technical'. These include terms such as *window, effective call, offered load, applied load.* If a terminologist were to rely on her/his own intuition, s/he might not identify these as term candidates. However, we know that they are terms because the phrases with which they occur function as hinges to indicate the presence of terms. Moreover, subject experts have confirmed that these term candidates are indeed terms.

Term formation patterns in the GCSE corpus

Table 2. Term formation patterns, GCSE Corpus

Term formation patterns	Term candidates	Term formation patterns	Term candidates
+ det VBN NN	a balanced diet	+det NN	a balk
	a closed system		a barometer
	a concealed seam		a calorie
	a sex-linked disease		a carrier
- det NN NN	bank cashier		a caterpillar
- det NN NNS	linotype operators	-det NN	chalk
+ det VBG NN NN	a scanning electron micrograph		chloramphenicol
			coal
			barley
		+ det JJ NN	a binary system
			a double circulation
			a dry cell
			a wet pit
			a white dwarf
		- det JJ NN	hydrochloric acid
			electric drills

The list of term formation patterns in Table 2 contains those which were identified by examining all nouns and noun phrases which occurred with hinges such as *called* and *e.g.* Unlike the terms in the ITU corpus which were frequently complex or multi-word terms consisting of 3 words, the terms in the GCSE corpus are generally single word or 2 word terms. There is a very small number of 3-word terms.

Refining the term identification process

I suggested previously that it might be useful to consider applying a further set of criteria in order to refine the term identification process. The purpose of the additional set of criteria would be to prevent certain items from being considered as term candidates, even when they meet the corpus-specific term formation criteria which would normally allow them to be considered.

In analysing descriptive patterns in the corpora, I observed a number of hinges which signalled the presence of a term in a sentence. I decided to use these hinges in order to refine the process of term retrieval. I envisaged that the process would occur in two stages. The first part of the process involves an analysis of the corpora using the corpus-specific term formation criteria, as outlined previously. This identifies all term candidates and many non-terms in each of the corpora. The second part of the process selects only those term candidates which also satisfy the generic criterion (cf below) and **at least one** of the additional criteria which are based on the occurrence of the hinges described below.

While it was necessary, for the first part of the term identification process, to devise a set of corpus-specific term formation patterns, this section describes specifications which can be applied to all corpora which have an informative function.

The first and, I believe the most important criterion is that of generic reference. Generic reference is one of the key tenets of the traditional theory of terminology where a clear line is drawn between generic concepts and individual objects.

It should always be borne in mind that concepts cannot be taken for the individual object themselves. They are mental constructions serving to classify the individual objects of the inner or outer world by way of a more or less arbitrary abstraction. ISOR 704 Naming Principles (1968:8).

ISO makes a distinction between the generic concept and the individual object, i.e. the realization of that concept by virtue of its location in time and space. Picht/Draskau (1984) also make a distinction between the generic and the individual. They prefer, however, to distinguish between a generic concept and an individual concept rather than an individual object. Like ISO, they argue that the presence or absence of definiteness, i.e. whether or not the concept can be located in time and space will determine whether or not the term is to be considered generic or individual.

An individual concept will be represented by a *name* rather than a *term*. The notion that the absence or presence of an indication of time and space allows us to distinguish between the generic and the individual respectively is an interesting one. However, while the theoretical approach to terminology makes this distinction, it does not make any reference to how this distinction is realized in text, and this is what is of particular interest to us.

We have noted in our corpora that terms are referred to in two ways. Broadly speaking, terms are either marked or unmarked. When I use the expression *marked term*, I mean that it may be preceded by any number of determiners, with the exception of the indefinite article. When I use the expression *unmarked term*, I mean that the term is preceded by the indefinite article or is not preceded by any article at all. When a term is marked, the reference is likely to be specific. The author is situating the use of the term in time and space, in this instance within a particular text. When unmarked, the reference is likely to be generic. I have ascertained, for example, that when a term is not marked by any indication of definiteness, it refers to its generic concept. When the same term is marked by definiteness or when its environment does not meet the required conditions, it is not possible to assume that reference is being made to the generic concept. There are, however, exceptions to this rule. For example, there are instances where a marked term at the beginning of one sentence functions as an anaphoric reference to a generic reference in the previous sentence. However, we need not concern ourselves with these for identification purposes because the generic reference will already have been identified.

The first condition which term candidates must meet is: *A term candidate must have generic reference*. For a term to have generic reference, it must be *unmarked*, i.e. preceded by the indefinite article or by no article at all.

The second condition which I specified relates to modifiers. If a term candidate is modified by a word other than a word which is considered to be part of the term itself, it is considered to have specific rather than generic reference. The second condition, therefore, is: *A term candidate may not be modified by a word which does not form an integral part of the term.*

If a term candidate satisfies each of these two criteria and occurs with one of the hinges described below, it may be considered to be a term.

The hinges which I have identified in the two corpora as signalling the presence of a term are: *called, known as, e.g., the term, is/are defined as, denote/denotes, consist/consists of, comprise.* The combination of the term formation selection restrictions with the generic and hinge restrictions appears to be sufficient for the purposes of term identification. Examples of occurrences of some of **the hinges are provided below.**

Examples with *called* from the ITU corpus

ate-oriented version - The state is described uniquely using pictorial elements. This picture is **called** a state picture. - The transition action sequence is implied by the difference between

generic name for a set of applications provided to telematic users. Each of those applications is **called** a telematic interworking application (TIA). Access to and participating in

present the DTE identity in the address fields of#IT# call set-up #IQ# packets. This number is **called** a "DTE address" and is defined in § 3.1.3. #TITRE# 2.3.1 #IT# Service attributes

values is an integer which references an instance of use of an abstract syntax. The integer is **called** a #GR# presentation context identifier #AS# and fills the "indirect-reference INTEGER" field

Examples with *called* from the GCSE corpus

< one by a narrow piece of land **called** a balk. Why was this bad farming?)
< can be measured by an instrument **called** a barometer. There are two main >
< pulse of electricity. This code is **called** a binary system. The pulses travel >
< star and the two stars together are **called** a binary star. The Solar System has >

Examples with *known as* from the ITU corpus

rk are identified by a unique code **known as** a point code (Recommendation Q.70
g routes in their priority order is **known as** a signalling route set. One signall
ly released telephone connection is **known as** a cutoff call when the connection
the order of 100 to 1000 metres is **known as** an extended passive bus. This confi

Examples with *known as* from the GCSE corpus

< directly to the electorate is **known as** a referendum. Holding a >
< through the air as a cloud. This is **known as** a POWDER AVALANCHE. >
< The Palestine Arab guerrilla force, **known as** Al Fatah, operated against >
< the amoeba to help it move. (This is **known as** amoeboid motion # An amoeba >

Examples with *e.g.* from the ITU corpus

ion are provided by different media (**e.g**. a satellite channel in one direction
whom the charges are to be charged (**e.g.** a branch, a bank or a similar institu
it/s channel time slot can accomodate **e.g.** ,a PCM-encoded voiceband signal co
rough another communication system (**e.g.** a physical delivery system) that is

Examples with *e.g.* from the GCSE corpus

following groups:Class I Professional **e.g.** chartered accountants, senior civil >
< drugs are produced in laboratories, **e.g**.chloramphenicol # used to combat >
< years) and are called non-renewable, **e.g.** coal. problems will be caused if any
< Some food is dried in a vacuum, **e.g**.coffee granules. This is called >

Examples with *The term* from the ITU corpus

alignment #IQ# For the 6312 kbit/s hierarchical level, **the term** "frame alignment" is synonymous with "multiframe align
ugh which the desired analogue points could be derived. **The term** "virtual analogue switching points" is also used for "vice primitives", "peer protocol" and "peer entities". **The term** "boundary" applies to boundaries between layers
telex subscriber over the telex network. #TITRE# 12.6 **The term** "notification" applies to the forwarding of an advice

Examples with *The term* from the GCSE corpus

< energy is passed on to animals. **The term** biomass is used to refer to anything
< referred to as bureaucrats. **The terms** bureaucracy' and `bureaucrats' have
< are not the Coastal management **The term** COASTAL MANAGEMENT is a <
camps of the Boer War **The term** `concentration camp derives from the

Conclusion

When embarking on this research, I started from the premise that previous efforts to identify and retrieve terms from a large body of text had resulted in the inclusion of many words or phrases which could not be considered as terms in the context. I used the same type of positional approaches adopted by researchers such as Daille and Nkwenti-Azeh but added a set of selectional syntactic restrictions to refine the term identification process. I have shown that it is important for a term candidate to have generic rather than specific reference and that the generic criterion can be formulated and implemented in the retrieval process. As the corpora which I was using had an informative function, I was able to use the information signalling hinges in my selection restrictions. I believe that it should be possible in other text types to avail of other hinges (e.g. certain types of verbs, position in sentence) to refine the term retrieval process. Future research will include an investigation of other text types to assess the general applicability of the approach proposed here.

Footnote

[1] This is an example of an NP with a generic class word as head of the NP. I would envisage stripping the NP of the head word at a later selection stage.

Bibliography

Daille, B. (1994). Approche mixte pour l'extraction de terminologie: statistique lexicale et filtres linguistiques. PhD Thesis. Université Paris VII.

ISO R704 (1968). Naming Principles.

Jacquemin, C., Royaute, J. (1994). Retrieving Terms and their Variants in a Lexicalized Unification-Based Framework in *Proceedings of the Seventeenth Annual International ACM-SIGIR Conference on Research and Development in Information Retrieval.* Springer-Verlag. pp. 132-141.

Nkwenti-Azeh, B. (1992). Positional and Combinational Characteristics of Satellite Communications Terms. *Eurotra-UK Final Report.*

Picht, H., Draskau, J. (1984). *Terminology: an Introduction.* UNESCO, Paris.

Yang, H.Z. (1986). A new technique for identifying scientific and technical terms and describing science texts in *Literary and Linguistic Computing,* Vol. 1, No.14, pp 93-103.

Inferencing and the Student of Translation.

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Introductory remarks

While it seems that a true interest in the pedagogy of translation is at last beginning to emerge, little attempt has been made to date to study overall student performance and in particular to study how students acquire translation skills in real situations. Although it is true that a very considerable literature exists on the theoretical aspects of the subject and manuals and coursebooks abound, little research has been conducted with the aim of uncovering the strategies employed by fledgling translators in resolving interlingual difficulties. More often than not the emphasis is on the product rather than on the process; on the finished works rather than on the way in which they have been achieved. The theoretical frameworks provided have been usually fairly hard-nosed affairs drawing on existing translations rather than on hypothetical work. There is nothing inherently invalid about such approaches. They are, arguably, what the consumer of the finished article as well as the theoretical linguist can best use. Our criticism is that they supply us with very little real information about what is going on in the mind of the practising translation student. It is significant that in his 1991 book, Newmark noted that scarcely anything had been written on the topic of how the teacher might best intervene to assist the learner. Another commentator described the situation in the following words: "...teachers still tend to rely on intuition and practice as the only way to train translators" (Baker, 1990:167).

Yet, researchers have begun to modify their stances in recent years. Rigid descriptive scientific approaches are giving way to more communicatively orientated views stressing function. The translation process is being seen increasingly in terms of what it is intended to achieve in terms of the target culture. Nord's plea for better translation models with didactic relevance are evidence of this trend. It is significant that a writer of Delisle's stature should write that "traduire consiste à réexprimer non les signes, mais des concepts, des idées" (Deslisle 1980: 72). The same author, in his 1994 manual goes on to tackle the very real problem of polysemy, deploring those translators who always translate the English word problem by probléme when in fact, depending on the case, the word can be translated in some 94 different ways. In descriptive terms, the focus is moving away from the discreet units to encompass considerations of context and also to some extent from form to meaning.

This change of direction which we identified is becoming increasingly visible in the field of psycholinguistics. It is significant that such a highly regarded researcher as Ellis, while drawing upon an impressive body of research, stresses that one of the reasons why the "metacognitively sophisticated learner" is successful is that he has developed "strategies for explicitly mapping the meanings of words, for enmeshing them into the meaning networks of other words and concepts and imagery representations" (Ellis, 1994:52). We would argue that this is of particular importance in the case of translation students, since they are engaged precisely in building up extensive networks of meaning, which they will need to access at various times in solving translation problems.

To our view, it is also important that in the above-quoted text, Ellis frequently refers to the concept known as inferencing. Basically, when we infer we utilize attributes and contexts that are familiar in recognizing or making sense of what is unfamiliar. The process may be held to suggest, though it need not necessarily denote formal logical inference as used in the sciences or more especially in law, which is the method of drawing permissible conclusions from available data. As a psychological approach we might describe it as the attentive reading of convergent cues. In fact, though perhaps underexploited by theorists, the concept has a respectable history in applied linguistics. In a highly regarded though subsequently neglected paper, Carton claimed a major role for this process which "undoubtedly comprises part of the strategies for learning and using language" (1971:56).

Of course, it might be added that from the linguist's point of view, the distinct unit such as the morpheme, word or sentence lend themselves to ready analysis. One of the arguments we wish to make is that in the field of Translation Studies, this approach is scarcely ever adequate. As Steiner very eloquently put it: "Language is fluid" in its operations: "a coherence, if such a description is allowed, in constant motion" (1985:203). The root problem, as one commentator astutely pointed out, is that, unlike an individual word or morpheme, "a sentence rarely expresses a complete thought" (Kaplan, 1972: 26). To discover the overall meaning of an utterance we need to go beyond the cosy individual units and become aware of the wider system of cross references which may be operating. Highly influential writers such as Vinay and Darbelnet viewed the translation process as primarily a science. A hefty proportion of their famous *Stylistique Comparée* is devoted to describing a system for converting stretches of language A into language B. The well-known *procédés* of the authors do not so much solve problems for students as describe relationships obtaining between groups of words and identify possibilities for rearrangement on the basis of category. It will be instructive to examine just one of their best known examples, namely, that of transposition as in the following sentence:

Il traversa la rivière à la nage = he swam across the river

The descriptive action verb "swam" is rendered by the more neutral verb "traversa" (to cross) requiring an adverbial adjunct "à la nage" to clarify the nature of the activity. The operation is said to involve a change at the level of grammatical category. However, if we move on to examine another example we see that this type of comparison is of limited use. We can easily envisage cases where "traversa" need not be qualified at all but would still be translated as "swim". In the sentence:

Etant tombé dans la rivière, il la traversa.

We identify "traversa" as meaning "swam", not through any analysis of the word itself, but because of the proceeding clause and the visual image conveyed by "rivière". We are not informed how the crossing took place, we simply scan the relevant stretch of text, read the available cues and draw the obvious conclusions. We would claim that the primary strategy involved here is that of *inferencing*.

Selecting the appropriate translation for the French word directeur will provide a different kind of example. Students are invariably informed that the correct translation for this word in a commercial setting is the English term "manager". In a typical example, this principle works well enough:

Le *directeur* affirma que la société avait fait des bénéfices.

(lit: The manager stated that the company had made profits).

Yet if we consider the following pair of sentences occurring in succession it will be seen that that when making an assessment, considerable care is needed:

1) La fréquentation du théâtre était en baisse depuis le début de la saison précédente.

2) En cons,quence, lors de réunion annuelle, le directeur a dû présenter un déficit budgétaire important.

The student who blindly translates sentence 2 without referring back to the overall context provided by sentence I will produce a serious, if understandable error. Terms like "budgétaire" and "déficit" both suggest a commercial context and may tend to trigger the English word "manager". In fact, if the student remains mindful of the information contained in the preceeding sentence, he will grasp that the correct rendering is certainly *theatrical* or *stage director*. Of course, the basic inferencing strategy will need to be backed up by efficient dictionary usage. The mistake which we have described would not necessarily be the outcome of misuse of the dictionary. Rather, it is the kind of overall strategy followed which is important. Central to this process is the attentive reading of the cues and clues provided by the textual context and drawing the right conclusions as to meaning.

Focus on practice: some elementary cases.
In what follows we will provide a number of examples drawn from student work where we believe this principle is seen to be clearly at work. These are drawn largely from the final year theses at the Ecole d'Interprètes Internationaux at Mons University in Belgium. Students taking English usually choose to translate a book from English to French, which might be either fiction or non-fiction. They occasionally work the other way round i.e. into English, but since they are franco-phones for the most part this is quite rare. They are required to write a fairly elaborate commentary where difficulties encountered in the course of doing the assignment are logged, analysed and described. It is an ideal source of raw material for the kind of research we are doing, since being open-ended and not elicited it does focus on real as distinct from theoretical or potential translation problems. In addition, the students are at a very advanced level in English which means that they can usually see the difference between a "goof" caused by blind language *interference* and the true translation problem whose solution requires reflection and possibly further research. Also, included are some examples taken from in-class exercises with third-year groups.

The first example to be presented is taken from a translation of a social history entitled Scottish Voices.

1) "At the word 'dungarees' the women would groan in sympathy.
Washing dungarees was a job they all hated and ours was a railway district...".

The dictionary defines this item as coarse Indian calico, overalls etc., jeans. The Harrap's gives combinaison, bleus (de m,canicien). The student is faced with choosing not just which word is most accurate but which word can be expected to have a comparable effect on the francophone reader. The two words which help us to arrive at the right decision are "groan" and "Railway". We understand that the garments in question were the cause of much unpleasantness and we can imagine through contextualization, the kind of greasy condition in which the womenfolk received them. "Bleus" seemed most suitable and most calculated to produce a similar reaction.

> "Au mot 'bleus', les femmes grognaient en signe de compassion. Toutes sans exception détestaient de laver les bleus de travail, mais comme notre quartier, tait un quartier des cheminots...".

The next example is taken from Seán Ó Faoláin's famous book *The Irish*. "...everywhere dark and well-nigh impassable woods - battles in 'passes' generally meant passes through forests..." (p.39). The difficulty here concerns the precise meaning of the word 'passes'. A careful reading here will reveal that the word is not being used in the modern sense of a *narrow passage through mountains* (Concise Oxford Dictionary). The nearest equivalent word in French 'passage' cannot be used so the student opts for "...dans les allées des forêts...". This might be considered a particularly easy case since the author of the source text had identified the problem in advance. Nonetheless, some visualization of the geographical context was needed in order for the student not to be misled.

The next example involves a rather deplorable error caused by a failure on the student's part to look beyond the individual sentence at the wider context. The excerpt is taken from *We Europeans* Richard Hill's best-selling book on the peoples of Europe. "...One wonders whether this is the effect the 'clubbishness' of the English establishment or a reflection of what is basically a two-party system..." (p.52). The main problem is posed by the word 'clubbishness' a relatively rare word. Apparently, misled by ready images of robust truncheon-wielding British bobbies, the student produced the following statement first time round:

> "...one peut se demander si ceci provient du penchant des Anglais pour leur matraques ou bien..." (lit.: one wonders whether this is because of the British liking for their truncheons...).

While we might be first tempted to dismiss this error as mis-use or even non-use of the dictionary, I would tend to argue that the core of the problem is that the student has failed to read the sentence where 'clubbishness' occurs in its wider context. In fact, there had been enough information about clubs and English social life in the preceeding section to guide the student in the right direction. The same paragraph contained the key-word 'establishment' which should have provided a clue as to the sense in which 'club' was to be understood.

Inferencing: more complicated cases.
The three cases discussed above involved inferencing at the level of immediately available cues. The student needed to scan, study and reflect in order to come up with the right solution. The following examples involve more complicated intellectual processes.

The first example comes from a book of Irish folk tales. When working into French, a particular problem is raised by repetition. English tolerates rather well the re-use of the English word say in its different morphological variants. Acceptable written French shuns jarring repetition of this sort. Consequently, in the following extract, the student was forced to study the story in some detail so as to extrapolate the exact psychological frame of mind of the characters in the story at the time when the utterance was made. I reproduce the English text followed sentence by sentence by the appropriate translation into French in Italics, the problematical word being underlined in each case.

> "Who will dig the grave?" says the first man.
> *"Qui va creuser la tombe?"* demanda *l'un des trois hommes.*

Here we infer that say is used in the sense of "ask" requiring *demander* in French.

> "Who will dig it then but Paddy Ahern" says they.
> *"Mais Paddy Ahern bien sûr!" s'exclamèrent les deux autres.*

Here the circumstances are analyed to infer that "say" is used to express an exclamation. The third time the men speak it is understood that they are sniggering (ricaner = snigger).

> "...who will open it but Paddy Ahern!" says they.
> *"..mais Paddy Ahern bien sûr!" ricanèrent les deux autres.*

The type of operation we have been describing is a difficult though necessary exercise requiring several reflective readings of the original. Sensitivity to context and authorial intention as seen to be of paramount importance. The tendency to translate words fairly blindly and mechanically is undoubtedly responsible for the flatness which Delisle, amongst others, has singled out as one of the hallmarks of bad translation work.

The next example is taken from a short story in French in the style of La Fontaine. The problem encountered in rendering it in English derives from the fact that the French word for *crow*, *corneille* is feminine. Nonetheless, when the name of the bird in the story occurs as an antecedent, normal usage requires the use of the masculine pronoun. This raises an unusual difficulty for an anglophone working in English since he will need to *neutralize* the gender difference, translating both *elle* and *il* and their variants by *he* and its variants in all cases.

> *Il était une fois une corneille qui habitait dans une forêt grande et dense. Elle s'appelait Pierre...*
> *Il n'y a q"une seule chose qui le tracassait: la qualité de sa voix.*
> (once upon a time there was a crow who lived in large dense forrest. He was called Peter. ...There was only one thing which annoyed him: the quality of his voice).

The next example is taken from an article in a special feature supplement on Italian styles of management which appeared in the Belgian daily 'Le Soir' some years ago. The difficulty consists in identifying the title: "L'heure des artistes a sonné". Is it to be interpreted in a positive or a negative light? Interestingly, the group to which this article was presented as an in-class exercise split down the middle. Those who reacted instinctively opted for a negative reading, possibly making a cross-association with the expression "sonner le glas" (lit. sound death-knell of some one). This negative reading seems to receive some support from the opening lines of the article. We are informed that:

> *"Frappés de plein fouet par la crise de ces dernières années, les peintres se trouvent actuellement dans une situation de plus en plus précaire ..."*
> ("Severely hit by the recession over the past few years, artists are currently finding themselves in an increasingly precarious position ...".)

We are then informed that interest in art seems to be on the decline and that art-works are fetching lower prices than before. All this might confirm our initial impression. However, as we read carefully on to the end of the text we begin to realize that the point being made by the writer is that in spite of the difficulties currently faced by artists, better things are in store for them. The article comes to an end by stating:

> *"Ce nouveau festival qui démarrera fin août permettra au grand public de mieux connaître le rôle-clé qu'ont joué les artistes à Venise depuis la renaissance."*
> (This new festival which gets off to a start at the end of August will enable the public to learn more about the crucial role which artists have played in Venice since the Renaissance.)

In point of fact, the writer was attempting to show that artists would once again have an important role to play in the city of Venice. The title might best be translated by an optimistic sounding phrase along the lines "New horizons open up for artists". Those students who read through to the end and executed the translation in the spirit of the text as a whole were in a better position to make the right judgements. Clearly, this example teaches us a lot about the pitfalls of doing translation. An understanding of the original document *as a whole* is absolutely indispensible to the production of acceptable work. It is not enough to perform operations on parts of the source text in isolation from each other as at least some traditional theorists seemed to believe. A keen awareness of what is being communicated in other parts of the text will enable us to make the right *inferences* about how we should translate.

Concluding remarks.

There is little doubt in my mind that the procedure which I have termed *inferencing* has long been part of the standard panoply of strategic approaches used by translators. Nonetheless, professionals have always been fairly sceptical of theory and something of a gulf has existed between them and the class-room teacher. Those of us involved in teaching the subject have often laid too much stress on grammatical and stylistic details. Though this type of approach may have its place, there is a compelling argument in favour of studying these skills, such as inferencing, so that we can learn more about what is going on. In turn this information can be communicated to the student of translation. Consciousness-raising, represented in the present context by guided inferencing can play an important role in all this. The proposal to place greater emphasis on this process and encourage greater awareness of its practical use represent a sharp departure from those views of translation pedagogy which all too often reduced translation exercises to fluent item replacement or even worse to morpho-syntactical shadow-boxing.

It is the view of the present writer that when students are encouraged to read attentively, reflect, imagine, compare, make global or local assessments beyond the immediate unit, seek out clues in an overall attempt to get the feel of the source text, they are better prepared to carry out assignments. Obviously, efficient accessing of glosseries, as well as the mental lexicon and dictionaries has a crucial role to play. Yet it does not address a very basic question which is how this information should be used. As more than one specialist in terminology has readily admitted, too much emphasis on this particular field can actually undermine translator training, tempting students to look only for "terminological equivalents and translate without due regard for larger units of meaning" (Sager, 1991:109).

Indeed, I would not question the view that practice is essential in developing and refining translation skills. I would add, however, that a heightened sensitivity to the kinds of problems we have been discussing could do much to speed up this learning process, bringing nearer the day when the translator will be able to work on his own.

Bibliography

Baker, M. (1990). Linguistics and the training of translators and interpreters. In Thelen, M. & Lewandowska, B. (eds) *Translation and Meaning: Part 1*, Eurotherm. Maastricht.

Carton, A. A. (1971). Inferencing: a process in using and learning language. In Pimsleur & Quin (eds) *The Psychology of Second Language Learning*, Cambridge University Press.

Delisle, J. (1993). *La traduction raissonée. Manuel d'initiation à la traduction professionnelle anglais-français*, Ottawa. Editions de l'Université d'Ottawa.

Ellis, N. (1994). Consciousness in Second Language Learning: Psychological Perspectives on the Role of Conscious Processes. In *Consciousness in Second Language Learning*, AILA Review, 11.

Hawkes, T. (1977). *Structuralism and Semiotics*. Routledge. London.

Hardin, G. and Picot, C. (1990). *Translate*. Bordas, Paris.

Jacobson, R. (1973). Functions of Language. In *The Edinburgh Course in Applied Linguistics. Vol 1.*

Kaplan, R. (1972). *The Anatomy of Rhetoric: Prolegomena to a Functional Theory of Rhetoric.Language and Function,* American Language Institute of New York University. Philadelphia

Kirby, J. (1992). On the Use of Strategies in Translation. In Lewandowska, B. and Thelen, M. (eds) *Translation and Meaning: Vol.2.* Rijkshoogeschool, Maastricht.

______ (1995). Review article of: *La traduction raisonnée: Manuel d'Initiation à la Traduction professionnelle anglais français.* Ottawa, 1993. Le Linguiste, Revue trimestrielle. Vol. XXX1.2. Brussels.

Newmark, P. (1988). *Approaches to Translation,* Prentice Hall.

___________ (1992). *About translation,* Multilingual Matters.

Nord, C. (1992). Text Analysis in Translator Training. In Dollerup, C & Loddegaard, A. (eds) *Teaching Translation and Interpreting,* John Benjamins Publishing Co. Amsterdam.

Ogden, C. K. and Richards, I. A. (1923). *The Meaning of Meaning,* Ark Editions (reprint).

Sager, J. C. (1992). The translator as terminologist. In Dollerup, C. & Loddegaard, A. (eds) *Teaching Translation and Interpreting,* John Benjamins Publishing Co. Amsterdam.

Steiner, G. (1975). *After Babel*, Oxford University Press.

Citation as Persuasion in Research Articles

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Abstract

The medium of the research article is widely used for publicising research findings and knowledge claims and making them accessible to the rest of the research community. This communicative purpose, which contributes to the generic identity of the research article, is achieved, in part, through a significant identifying feature - Citation or references to the work of previous researchers.

The question that arises is **why cite** -- what is the writer's point in referring to the work of others? Our aim in this paper is to investigate the role of Citation in research articles and the motivation of writers who decide to report on other researchers' findings in the body of their own articles.

An important aspect of Citation is that, by reporting other researchers' findings, it creates inter-textual links among the texts produced by different researchers within the same field.

Sociological investigations of the research article suggest that it is increasingly being viewed as a persuasive genre. We suggest that Citation is a rhetorical element which contributes significantly to the overall persuasive tone of the article. Our specific aim in the present paper was to investigate this rhetorical role of Citation in linguistic terms. We hypothesise that Citations are primarily introduced into the body of an article to support or to be supported by some other proposition in the context.

On the basis of a semantic analysis of Citations we attempt to demonstrate that the persuasive motivation is effected through the creation of the Head-Support relation in addition to other semantic relations between Citations. We suggested a typology of Citations in terms of Support, consisting of Supporting, Supported and Non-Supporting Citations. The support could be represented as a cline with points of varying intensity, ranging from Primary Support, Secondary Support to Complementary Support.

Introduction

The academic research article has been described as a written text reporting on some investigation carried out by its authors, and which usually relates its findings to those of others, (Swales, 1990). It is the

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main vehicle for the transmission and exchange of information about the most recent research findings and the presentation of knowledge claims.

The work of sociologists of science has provided interesting perspectives on the nature of scientific texts, in particular, research articles. Such sociological investigations (Latour and Woolgar, 1979; Gilbert, 1976; Gilbert and Mulkay, 1984) suggest that scientific texts are not necessarily straightforward pieces of evidence, that they are the products of social accounting which are presented as objectively related to observed data. From the general view of scientific texts as portraying scientific argument, sociologists of science have suggested the presence, in texts, of rhetorical elements aimed at persuasion. The common denominator in such works is that they study the production of scientific knowledge in terms of the social construction of facts. Scientific activity is not seen to be the objective discovery and recording of the facts of science as they exist out there in the world, but as the scientist's perception and representation of reality.

Latour and Woolgar (1979) focus on the scientific activities in a laboratory to show how scientific practices become transformed into statements in a research article, which is the end-product, reporting the research in a marketable form for the consumption and persuasion of its readers. This production of papers is acknowledged by participants as the main objective of their activity.

Another approach to the view of scientific knowledge as the product of the scientists' operations, is that of Gilbert and Mulkay, (1984) which compares scientists' accounts of their activities and beliefs in two contexts of linguistic production:

i) **empiricist repertoire,** the experimental research paper in which they report their research,
ii) **contingent repertoire,** scientists' spoken accounts in informal interaction.

Gilbert and Mulkay's account is very revealing of the ideological bases involved in scientists' variable accounts of their practices in these different contexts. The empiricist discourse of the research article is shown to be the product of the scientist-writer's decision on how to interpret phenomena rather than a direct reflection of scientific reality.

Gilbert (1976) considers how the scientist demonstrates the veracity of his work by showing that the procedures, theories and data on which the arguments in her/his paper are based are those approved by the scientific community. One device for gaining such recognition is by citing papers which provide authority for the author's argument and corroborate the claims made.

This view of the rhetorical nature of scientific writing is obviously a departure from the idea that the features of research articles are necessarily determined by prescriptions laid down by the conventions of article writing. The general assumption about one such feature -- Citation or Reporting -- is that it delimits the area of research and, by summarising relevant previous studies, serves to contextualise the writer's current study. An important aspect of Citation is that, by reporting other researchers' findings, it allows for an interplay between the knowledge claims of different researchers within the same discipline. Citation, thus, has a significant role in giving the research article its communicative purpose and in setting it apart in terms of genre.

Our aim is to investigate the role of Citation in research articles and the motivation of writers who decide to introduce information from external sources into the body of their own articles. Studies which treat the aim of the scientific article as **the successful persuasion of readers** have got the most to offer those of us who are interested in accounting linguistically for the features of these articles. Our starting point, based on preliminary investigations of scientific research articles, was that the use of language and the staging of the argumentation in them suggest a persuasive motivation and we hypothesise that Citation is used as a vehicle for effecting the persuasion.

Citation in Research Articles

The sociological approaches described above did not aim to show the linguistic manifestations of the persuasive motivation. Chubin and Moitra's (1975) attempt to construct a typology of references according to a content analysis, i.e. **Affirmative, Supplementary** and **Negational** references, is of interest although, like the other studies referred to, it is not made in linguistic terms.

We consider that the function of any feature in the text should be identifiable as a linguistic phenomenon and, thus, our purpose is to examine the function of Citation in linguistic terms.

A pedagogic approach by Swales (1983) discusses reporting as **Describing Previous Research,** as one part of a four-move structure making up the Introduction sections of articles. Its function is seen essentially as contextualising the writer's intended research and providing the background for the next move which indicates a gap in the reported previous research. However, this does not account sufficiently for the complexities of the feature of Citation. Also, since Citations are pervasive throughout the article and not limited to article introductions, they must have a more extensive role than merely justifying the reporter's research.

Tadros, (1981), has investigated Reporting as a category of Prediction in economics texts. This type of reporting is identified by the presence of an explicit signal that attributes the proposition to another source. The contextual function of Reporting, as Tadros describes it, is to predict negative evaluation.

One linguistic investigation which refers to the function of Citations in dissertations in terms of support is that of Dudely-Evans (1986). He makes note of two moves in the Discussion sections -- **References to Previous Research** and also **References to Previous Research (support).** In connection with the latter, he states:

Another use made of references to previous research is to support a hypothesis made. (Dudley-Evans, 1986:143)

This is a very pertinent point which, unfortunately, is not developed further. We consider that the support function of references to previous research is far more extensive than suggested by these studies and needs to be explored further.

Corpus and Basic Assumptions

The corpus for this study consists of eleven research articles on psychosomatic medicine from the British journal -- **British Journal of Psychosomatic Medicine.** They were selected at random, provided they were not review articles. These articles provided the 129 Citations for analysis as well as the contextual framework for the proposed investigation.

We take as given certain social processes involved in the formulation and dissemination of claims through the medium of research articles. Our basic assumptions (derived from and explicitly stated and justified in the studies referred to above) are outlined below.

A researcher who has investigated an area and produced results and findings will want to communicate them to a readership for their evaluation. S/He hopes to convince other scientists of the significance of the findings so that they will eventually attain knowledge status. The way in which these claims are communicated will influence their acceptability and the effect they have as new knowledge.

The formal research article demands of the writer that it be presented as an objective record of the phenomena in the real world, that the researcher does not influence or shape it in any way. To convince readers that s/he has uncovered facts existing in the world and to demonstrate that the findings, are credible, the writer has to show that they result from the use of well-established and scientifically approved procedures and evidence. S/he also has to show that the theory and ideas on which argumentation is based are closely aligned to those currently approved by the scientific group. Most researchers are not developing models and theories entirely independently of existing ones although they may modify or extend them in accordance with the needs or results of their particular research. Thus, there is a great deal of interdependence between studies, in that most of the research in an area draws on currently approved core notions in the field. This provides a degree of consensus within the research tradition and allows researchers to demonstrate their membership of the research community. It is, therefore, entirely in the researcher's interests to show that his/her approach is not incompatible with those of others in the immediate field. It increases the likelihood that the contribution will receive the right recognition.

These, then, are the basic assumptions with which we begin this discussion of the functions of Citation.

Motivation for Citation

Work on clause relations by Winter (1977), Hoey (1983) and Thompson and Mann (1986b) has demonstrated that the constituent parts of texts, whether clauses/sentences or larger elements, are held together by semantic relations. The texts which manifest such semantic relations are all propositions produced by one writer. However, in the research articles under consideration, the writer brings in several external textual sources of information and these disparate pieces of information are presented in such a way that they read as coherent, connected text. In a previous study (Thomas, 1991), we suggested that Citations, i.e. reported information from other sources, when juxtaposed in sequence, acquire particular types of meaning as connected text. This is because the reporting writer integrates the citations by creating semantic relations between the citations at different levels and in particular ways.

Thus, Citations may be interpreted in terms of the ways they relate semantically to their co-text, which may be other Citations or writer comments. However, writers seem to draw only upon a limited part, a sub-set, of the finite set of relations which create the coherence in this genre.

The clause relational approach suggested that Citations do acquire additional meaning arising from the rhetorical purpose of writers. It appears that some of this sub-set of clause relations can be further characterised in a way that reveals the rhetorical role of the Citations they connect. We hypothesised that the primary function of Citation might be to act as a device to obtain support for arguments that the writer is putting forward. The term **support** is used throughout this paper to refer to the use of information from any particular study to contribute to the advancement of the argumentation underlying the claims of another study. This contribution may take the form of a study building on the foundations of the supporting study, the use of techniques or procedures, the use of concepts in one study necessary for understanding the work in another, information on which the findings of the second study depend, the provision of independent but supporting evidence for a claim etc. Citations can be seen as the means which reporting writers use to obtain such support.

In general, the kind of semantic relation between Citations can be distinguished from other categories of such relations in that they carry the added semantic feature + **support**. A Citation, representing one part of such a semantic relation, has the effect of supporting another Citation or writer statement which is the second part of the relation. We have categorised such relations as **Support Role Relations.**

The two parts of the relation are the **Supporting** part and the **Supported** part. Therefore, when we refer to a **support role,** we simply mean that a Citation is being used to provide or to obtain support for some other proposition in the context. The Citation is either doing the supporting or is being supported by the other part of the relationship.

Our position, then, is that Citation is a device used by a writer to persuade potential readers of her/his membership of the research community and to enhance the significance and acceptability of the arguments in the article. The Citations can be used to effect these goals only because they are held together semantically by the support role relations.

On the basis of the support factor, Citations can be generally categorised into those which are **supporting**, those which are **supported** and those which are **support-denying**. Support-denying citations are those introduced into the discourse in order to be negatively evaluated. Obviously, their function is to deny support although their negative evaluation serves the writer's purpose. Since there were only 3 such support-denying citations in our corpus, they will not feature further in our description.

Supporting and Supported Reports

The support notion, by definition, requires two obligatory elements, the supporting and the supported element. One of these is necessarily a Citation while the second element can be either another Citation or a writer statement. Optional elements are signals of support (see below) or signals of other semantic relations in certain contexts. This can be represented as below:

Supporting Element [+ Signal of Support] + Supported Element

The support role of Citations in a text can be manifested linguistically in three ways.

i) Reports Connected by Explicit Signals of Support

Writers often signal very explicitly the support role of a Citation in its context by introducing a limited number of markers. Most typically, this is some form of the key word **support**. Examples of such markers attested in our data are:

i) *supports; in support of this; is supported by; supporting this notion; support for Y; direct empirical support;*
ii) *is borne out by*
iii) *is consistent with*
iv) *further indication*
v) *similar*
vi) *Also*

The markers in i) to iv) above are slightly different from those in v) and vi) as the former are explicit markers of the head-support semantic relation as posited below. The latter, on the other hand, are generally used to signal other clause relations such as Matching Compatibility but, in particular contexts, acquire the semantics of support. Our grounds for claiming that they acquire this additional meaning is that, in their contexts, the signals **similar** or **also** can be adequately paraphrased by one of the explicit signals specified in i) to iv) above.

Head-Support as Semantic Relation between Citations

In a number of cases, the markers of support connect citations with other citations or writer statements when there is no other obvious semantic relation holding the two parts together. Such examples make a case for a new semantic relation **head-support.** It is characterised as a specific relation between two Citations or between a Citation and a writer statement such that one of them acts as a Head while the main semantic function of the other in the text, is to support it. The relation is identified by the obligatory presence of one of the support markers specified in i) to iv) above. The structure consists of the following:

Supporting Element + Signal of Support + Supported Element

An example of a head-support relation is given below:

Example 1

1. *The results of the present study add further support to the general psychosomatic hypothesis concerning the negative relationship between non-verbal expressiveness and physiological activation.*
2. *Overall, the headache sufferers showed significantly less head and eye movements across the various phrases of the psychosocial stressor.*

The two parts in the Head-support relation here are:

HEAD	*The general psychosomatic hypothesis concerning the negative relationship between non-verbal expressiveness and physiological activation.*
SUPPORT	*The results of the present study i.e. Overall, the headache suffers showed significantly less head and hand movements across the various phases .....*

In Sentence 1, there are two parts in the relationship: *the results of the present study and the general psychosomatic hypothesis.* In the context, *results,* is a cataphoric noun which is lexically realised in Sentence 2. This allows the two propositions, represented by the terms *results* and *hypothesis,* to be brought together and shown as semantically related. The relationship between them is one of support and this is explicitly signalled by *add further support.*

The writer has focused on this relationship in order to show that his work is within the field of current interest -- the general psychosomatic hypothesis. In the preceding sections of the article, it has been made clear that the writer's own work is in a context of research investigating this hypothesis. He has cited other studies of *the inverse relationship between expressiveness and physiological reactivity* which are all intended to be contributions to the development of the knowledge of this particular area of research. He thus attempts to convince readers that he is working in an area that is recognised to be of interest and approved by the immediate research community, in that they are all concerned with similar phenomena and issues. Having done this, there is also pressure on the writer to demonstrate that his findings are compatible with the models and theories currently accepted by his fellow researchers. Endorsement of the findings by the scientific community depends on such compatibility.

The support relation with its explicit signal *adds further support,* in Sentence 1 above, is an assertion of the compatibility between the writer's own set of results and the compatibility between the writer's own set of results and the currently approved hypothesis in the area. The *psychosomatic hypothesis* is one that has been acknowledged to be adequate (signalled by *general*) and therefore it is more effective to cite it rather than one that is less widely known and accepted. The introduction of the Citation at this point in the article is, therefore, evidence of the writer's attempt to convince his prospective specialist readers that the necessary degree of consensus for credibility exists. It is within this framework of general compatibility that the writer makes the claim of a finding that is also new or original.

The example above illustrated the writer's attempt to gather support for the results of his own research by reporting from another source. The support relation that we posit does not exist only between a statement originating from the writer and a piece of reported information from an external source. The very same relation often exists between two citations from two different sources so that one Citation is shown to support another Citation. The underlying motivation, however, remains unchanged. The writer is still attempting to enhance the strength of his overall argument by reporting information which supports a Citation that is necessary for the line of argument that he is following. This is seen in the example below:

EXAMPLE 2

1. *Morgan and Roberts [3] maintain that 10 weeks may not be long enough to reveal a change in relatively stable and basic personality traits.*
2. *They suggest that prolonged and intense exercising may be necessary before psychometric tests can reflect a change.*
3. *Ismail and Trachtman [22] as well as Buccola and Stone [23] have provided evidence supporting this notion.*

4. *Specifically they found emotional stability, imaginativeness, self-sufficiency, conscientiousness, persistence and seriousness to increase in strength after prolonged exercise.*

In this example, the writer is not relating his own work to other studies in the area but the position stated in the Citation in Sentences 1 and 2 is, nevertheless, one that he wants to maintain. The evidence necessary to convince his readers of the validity of this position does not necessarily have to come from his own research or by his arguing for it. It can come from the research already conducted and received by the scientific community. Such intertextual support needs only be reported and brought into the body of the article. The purpose of introducing the second Citation (S 3, 4) and its role in relation to the first is asserted in the signalling sentence:

Ismail and Trachtman [22] as well as Buccola and Stone [23] have provided evidence supporting this notion.

The pattern in this category of support relation is made up of three elements:
Element 1 A Citation of a finding from another source *or* A statement of writer's own findings.
Element 2 A signalling sentence or a marker of support.
Element 3 A Citation of a finding from an external source.

We note that the support relationship is not in any invariable linear order, i.e. it is not necessarily the case that Element 1 is the supported finding while Element 3 is the supporting findings or vice versa. The relationship can be stated either as:

Finding X supports Finding Y

Or as

Finding X is supported by Finding Y

Role of Other Clause Relations in Indicating Support

In the section above, we argued for a head-support relation between a Citation and another statement because one part of the pair had no other role in the text except to provide support. Apart from this new head-support relation, the remaining kinds of semantic relations considered to be typical of the genre, (e.g. claim-basis, general-particular, cause-consequence) also can serve to convey the notion of support of one part for the other. The support role relationship is not inherent in the semantic relation itself in the way it is for the head-support relation discussed above. Rather, it is instantially created in the context. That is to say, the two parts are in a semantic relation such as Claim-Basis, (but not the head-support). However, in the particular context, they also acquire the added semantics of a support role relationship such that one part is perceived as supporting and the other part as being supported. This can be crudely glossed as:

Citation 1	**Claim**	**Supported**
Citation 2	**Basis**	**Supporting**

The semantic relation itself can thus become the linguistic manifestation of a support role relationship between pairs of statements which include citations. The support role, in this case, can operate in two ways. Sometimes the meaning created by the semantic relation works in conjunction with an explicit signal of support of the kind described above for the head-support relation. In such cases, the citations would be treated as being in multiple relations. In the second group, there is no explicit signal that the Citation is serving a support role. However, there is an implicit meaning drawn from the semantic relation which the Citation forms with the second member of the relationship *in that particular context*. This is discussed further below.

Support as Text Specific

We have said before that the support role relation of the Citations discussed above is not an inherent function of the clause relation that the Citation has with the second member. That is, the meaning created by the clause relation does not of necessity carry with it the meaning of support. For example it might be said that any statement in a Matching Compatibility relation with another statement will support it, and similarly a statement in a Matching Contrast relation with another will, of necessity, refute it or deny support for the second statement. This is not necessarily so, and the support role relation can be instantially created in its particular context of occurrence. The example below illustrates this.

EXAMPLE 3

1. *Table 1 shows that for disproportionate disability the psychological variables were more predictive than the physiological variables, with no physiological variable emerging in the analysis.*
2. *These results are consistent with the work of Rutter [5], who found that attitude and belief measures were the most important predictors.*

3. *However, Rutter's outcome measures were concerned specifically with time off work, whereas the present study was concerned primarily with disability.*
4. *It appears that attitudes and beliefs are of fundamental importance over a wide range of relevant variables in relation to chronic bronchitis patients.*

Sentence 1 above states the results of the writer's own research. In Sentence 2, these results are compared with the findings of another study and said to be consistent with them. In our terms, this indicates that they support the reported findings.

We are here especially interested in Sentence 3 in which one aspect of the reported study is contrasted with that of the writer's own work. The Matching Contrast between the two is marked by the connectors, *however* and *whereas,* which indicate that the two are semantically incompatible. One might expect that the semantic relation of contrast would signal the textual function of negative evaluation or refutation of this aspect of the study. However, in this context, the Matching Contrast relation serves to increase the support for the reported idea rather than refute it. This support role is not precluded by a Matching Contrast relation; on the contrary, it acquires the support in this particular context. The writer's research was concerned with the *disability* variable while the reported research was concerned with the *time off work* variable. Sentence 4 makes it clear that his contrast only serves to strengthen the writer's case by allowing him to draw a broader generalisation in place of his original claim in Sentence 1, namely, that the *psychological variables were more predictive than the physiological ones.* He can claim that a *wide range of relevant* variables is involved as it can now be seen to have been demonstrated in relation to both *the disability* variable of his own research as well as the *time off work* variable of the cited study. The support effect here is thus instantially created and specific to the text.

Clause Relations with an Implicit Support Role

This category of citations/writer statements are connected by any of the previously referred to sub-set of semantic relations typical of the genre, other than the clause relation of head-support. The difference between this category and those described in the section above is that there are no explicit support signals. Any signals that are present are those signalling the semantic relations. In the absence of signals of any particular clause relations, it appears that the reader perceives the support role relation of a Citation in its context as a result of his/her ability to trace a common core proposition in the supported and supporting parts of the stretch of text.

This core proposition may not be explicitly stated in the two parts. It is interpretative and often the reader has to arrive at it step by step, by identifying parallelisms and semantic compatibility between the parts.

The example below shows citations in some of the commonly occurring semantic relations and illustrates how the support works.

EXAMPLE 4

1. *Several lines of evidence suggest that the autonomic response to stress is excessive in the early stages of hypertension.*
2. *Obrist and his colleagues [19], found that challenging tests provoked activity in beta-adrenergic pathways between the sympathetic nervous system culminating in myocardial responses, particularly during the initial stages of the test.*
3. *Myocardial reactivity was greater in sons of hypertensive parents than in sons of normotensive parents [4].*

Sentence 1 is a generalised conclusion by the writer, while Sentences 2 and 3 give the particulars of *several lines of evidence*. We set the related parts of the generalisation against the appropriate parts of the statements below:

GENERALISATION	**PARTICULARS**
several lines of evidence	**Obrist and colleagues**
autonomic response	**provoked activity in**
	myocardial responses
	Myocardial reactivity
stress	**challenging tests**
early stages of hypertension	**initial stages of test.**
	sons of hypertensives.

In the example above, a Generalisation, which is a conclusion, is followed by Particulars, which are citations of results of other studies. There are no explicit signals which indicate the rhetorical function of the citations in Sentences 2 and 3 in relation to Sentence 1. But the semantic relation between the two parts allows a reader to perceive that the reported information in Sentences 2 and 3 is semantically compatible with, and, therefore, supports the general statement in Sentence 1.

Our claim that the semantic relation of General-Particular, in this context, is the linguistic manifestation of the rhetorical support that the Citations in Sentences 2 and 3 provide, is also borne out by a consideration of the function of the generalisation in Sentence 1 of the text. In the preceding context the writer puts forward three possible explanations of results he has obtained in his own study. This is stated as:

EXAMPLE 5
This difference could have originated a) in the subjects initial emotional response b) in the transmission of the response via the autonomic nervous system, or c) in the target organs.

The three possibilities are discussed in turn and a) and c) are rejected as not being reasonable explanations. The explanation in b) however is put forward as more acceptable and this is done by citing studies which have results which are compatible with the notion *of the transmission of the response via the autonomic nervous system.* This is the explanation that the writer favours and he argues for it by stating particulars of studies which agree with it. He can make a case for it more effectively by citing the relevant findings of other studies which have already been validated and demonstrated for fellow scientists. The writer can take advantage of the acknowledged acceptability of these findings and, by citing them, gather support for the explanation he endorses.

Criteria for Support Role of Reports

There are criteria which enable us to identify a Citation used for the rhetorical purpose of obtaining support.

Criterion 1: Signals of Support

The single most important way of identifying Citations which are being used for a support motivation is the presence of one of the signals of support specified in the section above. The presence of these signals also distinguishes the citations which were being explicitly used for support from those whose support role was implicit. The extracts below illustrate how the presence of the support signal a) creates a head-support relation, and b) highlights the additional rhetorical function of Citations which are already in a particular clause relation with another Citation clause relation.

A. Signals in Head-Support Relation

The following is a typical example:

EXAMPLE 6
Thus, the similar pattern of response in the two groups during the neutral and general stress scenes provides support for stimulus specificity theories [16].

The head element is merely referred to here in reduced form but the full referent is retrievable from the preceding context. The underlined signal is crucial for creating a relation between the two parts and allowing the reader to see that the writer's results are being used rhetorically to provide support for the specified theories.

B. Signals of support co-occurring with other clause relations

The extract below consists of two Citations which are in a semantic relation of General-Particular.

Example 7

1. *There is increasing support for the hypothesis that stress related fluctuations in sympathetic activity may initiate the haemodynamic cascade toward hypertension in genetically susceptible individuals [4, 6, 7].*
2. *One line of evidence of particular relevance to this report comes from the study of young adults at risk for essential hypertension because they have a family history of this disorder or they exhibit labile hypertension.*
3. *Such at-risk individuals show elevated heart-rate blood pressure and plasma catecholamine responses to some laboratory stresses.*

Sentence 2 which provides particulars is thereby providing support for the Citation in Sentence 1 which states the general proposition. This rhetorical role of the citations is made explicit by the signal underlined in Sentence 1 above.

Criterion 2: Deletion of Signals of Support

Another way of testing a Citation in its context for a support role is by removing any support signals that are already present. If the coherence of the text is disturbed, then it is likely that the Citation had a support role.

Criterion 3: Deletion of Head Element

Additionally, it is possible, in Citations which are in a Head-Support relation, that is where a Citation or writer comment has support as its main function in the text, to delete the head. The effect of this on the coherence and acceptability of the text will give an indication of the role of the Citation in the context.

Criterion 4: Insertion of Support Signal

Where no explicit signals of support are present in the text, the possibility of insertion of an appropriate marker between the citations or Citation and writer statement will enable the reader to perceive a support role. An example of this is provided in (8) below:

EXAMPLE 8

1. *The research reviewed suggests that basic personality structure does not change as a result of improved physical fitness resulting from short-term exercise programs [1, 2, 5].*
2. *[In support of this] Morgan and Roberts [3] maintain that [this is because] 10 weeks may be long enough to reveal a change in relatively stable and basic personality traits.*
3. *They suggest that prolonged and intense exercising may be necessary before psychometric tests can reflect a change.*

In this example, the functional role of the two citations is made explicit by inserting an appropriate marker of support (in square brackets above). The second cited study, in providing an explanation for the phenomenon observed in the first study, accepts the finding itself as valid and significant. It supports the first finding by taking it as the given in order to provide an explanation for it and thereby extends the previous work.

Degrees of Support

Citations in a support relationship can be distinguished, in part, by the kind of support provided, i.e. the extent to which the reported information is essential to the thread of the writer's argument and the main knowledge claim s/he is attempting to make. For this, it would be more appropriate to see the Citations as clustering along different positions on a cline of support rather than belonging to clearly distinguishable categories with absolute values. The boundaries are generally fuzzy and we make no claims for the kind of criteria which will identify them invariably. This notion is represented as below:

most essential **least essential**

<--->

Primary Support **Secondary Support** **Complementary Support**

Primary Support

Citations which have a primary support role are generally introduced in direct connection with the statement of aim or hypothesis of the writer's own research or in a context of the discussion of his/her own findings. The Citations are integral to the writer's argument and the research depends on being able to take the reported information as established knowledge.

Secondary Support

A large part of the citations in our data can be considered to fall into this category. They may serve a variety of specific functions in their contexts but the common feature is that they generally help to increase the reader's willingness to accept or agree with an idea that needs promotion. The cited studies are intended to be seen by readers as authoritative because they present findings that are valid and important. They provide additional evidence which originates from a source outside the study which put forward the claim in the first place.

Citations which provide secondary support of another Citation may not be integral for the development of the writer's central argument. Nevertheless, they support a reported proposition that the writer endorses and wishes to present as an established idea. In such cases it is the supported Citation that relates to the writer's comments or claims. The supporting Citation relates to its head Citation and only indirectly, through it, to the writer claim. This indirect connection can be represented as follows:

Supporting citation ----> Supported Citation ----> Writer Claim

The way in which Citations serve to support other Citations reflects the status of these studies as making different but entirely compatible contributions and this is an essential part of the consensus building process for the development of scientific knowledge. An example of Secondary support is given below:

EXAMPLE 9

1. *Folkow and Neil [20] for example, postulated that thickening of blood vessels in response to sustained high levels of blood pressure potentiates vascular reactivity.*
2. *The blood vessels of well-established hypertensives are certainly thicker than normal, and minor abnormalities may even be present in individuals with marginally elevated blood pressure levels [21].*

The second Citation (S2) provides secondary support of the first. In order for it to provide primary support it would have to show results that *thickening of blood vessels ..... potentiates vascular reactivity.* Sentence 2 does not do this. Instead it provides evidence that blood vessels do thicken. It thus backs up what is taken as given in Sentence 1, in

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thickening of blood vessels in response to sustained high levels of blood pressure. By showing that there is a basis for one part of the first Citation, the possibility is that the reader will not be as inclined to dismiss the rest of it as being unfounded. The point is also that such supporting Citations are not crucial for the coherence of the argument the writer is developing.

The subsequent context for the Citations provided below reads:

If structural properties of the peripheral blood vessels were responsible for differences between groups cardiovascular reactivity should have been greater ... Instead responses were similar in both groups ...

This suggests that the first Citation is not a feasible explanation as it does not account for the results. Therefore, the support provided by Citation 2 is not part of the central argument. It could well have been omitted and no support provided for Sentence 1. But the writer is showing that he has explored all the possible explanations and evidence that might help to increase their acceptability is also provided. This indirectly serves to persuade his readers that the work is sound since informative hypotheses have been examined with fairness.

Complementary Support

Complementary support is provided by Citation of research which are parallel to the kinds of research referred to in the head Citation. The argument is drawn by analogy from other research in the field and, as with secondary support, the reported information does not provide direct support in the form of a Basis. The aim is to show that, in the parallel study, similar results were obtained or that similar conclusions were arrived at. In this way, the supporting study is shown to be of current relevance as it highlights the similarity of the results in a new context. The semantic relation between such Citations is often that of Matching Compatibility. An example of this is provided below.

EXAMPLE 10

1. *The winter snowstorm scene employed here is one in which vasospastic attacks are likely to occur and, indeed, produced the expected finger temperature decreases in Raynaud's patients.*
2. *Similar results were found by Lang [27] and Gelder and Mathews [28] who produced significant cardiovascular responses in phobic patients using imagined scenes of the phobic objects.*

Sentence 1 states results observed in Raynaud's patients while Sentence 2 provides the results of analogous studies of phobic patients. The point of reporting the results and therefore the complementary support arises from the fact that results similar to the writer's own were obtained in the parallel study. This argues for the replicability of the study and the greater applicability of the findings in varied contexts. The semantic relation is that of Matching Compatibility and it is signalled both directly and indirectly. First there is the explicit signal *similar results*. There is also repetition and parallelisms between the two sets of results. (the preceding context shows that the *finger temperature decreases* in Sentence 1 is a cardiovascular response).

Citations providing complementary support are best identified by the signals of the Matching Compatibility relation as in the example above. Because the Citation has little function in the context apart from showing a similarity in the results of the cited study to other findings, the supporting Citation can be removed from its context without disturbing the text in any significant way.

Conclusion

This chapter has dealt with the motivation for reporting in the light of prevailing notions that it is in an inherent relationship with a statement of negative evaluation or refutation of the reported proposition. An examination of research articles to see how reporting functions suggests, however, that writers use Citations as an important device for persuasion. The scientific research article has increasingly been viewed as a persuasive genre and our study of the function of reporting suggests that there is a linguistic basis for regarding research articles as vehicles of persuasion.

More specifically, we proposed that Citations are introduced into the body of the reporting article because they support or are supported by some other statement in the context. A characterisation of Citations in terms of support was presented and this consisted of supporting citations, supported citations and non-supporting citations. A description of the ways in which the support role was evidenced in language elements included the role of explicit signals of support and of semantic relations. The head-support relation was proposed as an addition to the existing typology of semantic relations.

The support provided by Citations is seen as not all of the same sort and we also proposed the existence of a cline of support with degrees ranging from primary support to secondary support to complementary support. The ways in which these differ from each other is explored through relevant examples and the presence of particular identifying signals.

References

Chubin, D. and Moitra, S. (1975). Content Analysis of References: Adjunct or alternative to citation counting. *Social Studies of Science*, 5(4), 423-441.

Dudley-Evans, T. (1986). Genre Analysis: An investigation of the introduction and discussion sections in M.Sc dissertations. In Coulthard, M. (ed.) *Talking about Text*, English Language Research, Birmingham University.

Fairclough, N. (1988). Discourse Representation in Media Discourse. *Sociolinguistics* 17, 125-139.

Gilbert, G. N. (1976). The Transformation of Research findings into Scientific Knowledge. *Social Studies of Science* 6, 281-306.

_____ (1977). Referencing as Persuasion. *Social Studies of Science* 7, 113-122.

Gilbert, G. N. and Mulkay, M. (1984). *Opening Pandora's Box*, Cambridge: Cambridge University Press.

Halliday, M. A. K. (1985). *An Introduction to Functional Grammar*, (London, Arnold).

Hoey, M. (1979). *Signalling in Discourse*, Discourse Analysis Monograph 6 (University of Birmingham).

_____ (1983). *On the Surface of Discourse*, (London, Allen & Unwin).

Latour, B. and Woolgar, S. (1979). *Laboratory Life: The social construction of scientific facts*, Princeton, Princeton University Press.

Leech, G. (1983). *Principles of Pragmatics*, London, Longman.

Mann, W. C. and Thompson, S. A. (1988). Rhetorical Structure Theory: Towards a functional theory of text organisation. *Text* 8(3), 243-281.

Swales, J. (1981). *Aspects of Article Introductions*, Aston ESP Research Reports, 1 (University of Aston).

_____ (1990). *Genre Analysis: English in an academic and research setting*, Cambridge, Cambridge University Press.

Tadors, A. (1985). *Prediction in Text*, Discourse Analysis Monograph 10, University of Birmingham.

Thomas, S. (1991). A Merging of Voices: An investigation of the way discourse is reported in medical research articles. PhD Thesis, Unversity of Birmingham.

Winter, E. O. (1977). A Clause Relational Approach to English Texts: A study of some predictive lexical items in written discourse. In *Instructional Science*, 6(1), Amsterdam, Elsievier Scientific Publishing Company.

Yearley, S. (1981). Textual Persuasion: The role of scientific accounting in the construction of scientific arguments. *Philosophy of the Social Sciences*, 11, 409-435.

French vocabulary - looking for ‘le mot juste’

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Much of what follows is specifically concerned with French. It is born of teaching experience, which tends to demonstrate that Irish students enter university with little vocabulary, and often leave with not much more. Although some of this may be applicable to other languages or other teaching situations, much is concerned with structures and stylistic traits peculiar to French.

The obvious way of measuring the importance of a word is to see how frequent it is in a text. There are problems associated with this. One is that the most important words in French are *le, la, de, que* and so on.

One way out is to look at different categories of words: it is convenient - though not strictly accurate - to tell students that there are eight types. This is possible if one ignores the existence of exclamations like ‘eh hop!’, ‘aïe!’ or even ‘ouïlle!’ This voluntary amnesia is motivated by the pedagogical desire to have equal-sized, neatly symetrical categories, and produces two balanced groups of four:

firstly: *noun, verb, adjective, adverb* (semantically ‘full’; open series)

secondly: *pronoun, preposition, determiner, conjunction* (semantically ‘empty’, closed series providing grammatical information such as function of word or relationship between words in first series).

It is the second group that occupies so much space in any text. Conversely, the first group takes up most room in the dictionary. One might say that the first group is ‘semantically full’ (to which most people will assent) while the second is ‘semantically empty’ (to which people will not agree without rather severe reservations). Less tendentiously, one could say that the first group is an 'open series' (with any and possibly a growing number of entries) while the second (articles, prepositions and the like) is made up exclusively of closed series (all of which may be known).

While the second group accounts for the most frequent occurrences in a text, therefore, the first group accounts for the greatest number of dictionary entries. When people speak of vocabulary or lexis, it is generally of the first group (noun, verb, adjective, adverb) that they speak, while the closed series (pronoun, preposition, determiner, conjunction) account for much of what is taught - insofar as it is taught - under 'grammar'.

Here it becomes necessary to present views which are very much open to challenge, and in what follows immediately, it is not the author's intention to correct the popular view but to try to define it, so as to be able to demonstrate some of the consequences of such a view.

The bipartite division of 'grammar' (often cloaked with as much intellectual respectability as may be lent by the word 'structure') and 'vocabulary' seems to subtend many courses. There is often an unspoken presumption that 'structure' is more important than 'vocabulary' because once the outline structure of the language is understood, the learner is free to 'fill it out' with as much or as little vocabulary as he/she wishes. It is not obvious why the proposition cannot be inverted to read 'once the learner has a few thousand words to his/her credit, he/she can put in a bit of structure'. However, the precedence accorded to structure is either a cause or an effect of the fact that people seem much better at teaching grammar than vocabulary, and the metalanguage that goes with it is well understood to the teachers, whatever about the pupils. Words, on the other hand, seem to come in off-putting lists or worrying avalanches.

Not surprisingly, people wanted to find an easy place to start, as with 'le français fondamental'. The problems associated with this project - ensuring that it was a starting rather than an end point, finding authentic material etc. - are too well charted for it to be pointful to go into them further here. However, these word lists do perhaps retain some interest as a diagnostic or research tool.

Whatever about one's declared views as a linguist, teacher or practitioner, whatever theoretical positions one may adopt, there is reason to believe that some of the underlying assumptions about 'le français fondamental' subsist. Especially the view that 'you've got to start somewhere'. And so, by the nature of things, you have. Common sense will dictate that *eau* is more essential than *aquatique, nautique* or *humidification*. The question is: 'How far and how long do you have to choose?'

Secondary and third-level attitudes may well be divergent, but together conspire to leave this problem unsolved.

At secondary level, there seems to be a feeling that the 'important' or 'basic' words should be dealt with first, so that at least candidates will have minimal equipment to pass the Leaving Certificate. The notion that some words are more important than others - understandable as it may be - in effect brings us back, even if only in an informal way, to something like the discredited 'Français fondamental'.

The university view is not minimalist in its objectives, though arguably minimalist in its effects. As the third-level is the final part of a student's education, it is only natural to feel that it should lead to some kind of end-point. Just as the starting point is zero knowledge, so the end-point ought to be total knowledge, or 'all of French'. The fact that grammar (structure) is seen as the major problem area often leads to a situation where all classes (writing, translation etc.) in fact turn into grammar classes, and students fall by their chronic inability to make simple agreements, or conjugate any but *-er* verbs. A complete knowledge of vocabulary is desired, wished, but not meaningfully taught.

Thus, it is as if secondary teaching concentrated near to the starting point, and third-level near to the end-point, leaving an unaccounted-for hiatus in between.

In this author's view, the vocabulary deficit may be in large measure accounted for by two things:

a) the obvious word is not always as obvious as all that
b) meaning does not always reside within single words

These propositions need to be expanded further, explained and illustrated.

The obvious word is not always as obvious as all that

In an unspoken way, the notion that there is an obvious word for a given 'thing' is subtended by a notion of translation, on the model 'x is how you say y in French'. At a stage when translation is not at all practised at secondary level, and not always even in the first years at university, then, it has a kind of after-life in the unspoken assumption that for any English word, there must be a single serviceable French equivalent. All university teachers will have encountered pieces of undergraduate French where the very un-French text becomes understandable once one translates each word individually into English; clearly, the student has in effect been translating his own text, but most probably not consciously so: just using the very English conceptual units with which he/she is equipped. Improved communicative teaching approaches have not lead to any diminution of the view that words in different languages correspond on a simple 'one to one' basis. Arguably, greater translation practice might actually improve the situation rather than the reverse, if it were undertaken as an exercise in contrastive linguistics.

First, a few simple examples. A friend remembers starting French with a master who was a recycled Greek teacher, and who announced: 'Today, boys, we're doing "ether" the French verb "to be".' The pronunciation has changed, but not always much else. Thus from an early stage, the idea that 'to be' = 'être' takes root. Both 'être' and 'to be' either mean 'to exist' or serve as auxiliaries. However, the frequency of pronominal verbs or intransitives that form the 'passé composé' with 'être' in French means that the verb 'être' is, in any event, to be found in abundance in any French text. Where the verb means 'to exist', there is a good chance another verb will be used, quite probably 'exister'. But also: *constituer, représenter, offrir l'exemple de, se trouver, s'avérer.*

Here are just a few examples:
'elle représentait la plus haute juridiction du pays'
'l'autorité royale dans l'ouest de la péninsule se trouva soudain gravement compromise'

In the following example, the verb 'être' occurs once, but could have occurred twice:
'Le Balp fut assassiné par traîtrise par le marquis de Montgaillard, et les plans se trouvèrent désorganisés'
'Elles pourraient même s'avérer plus fécondes'.

If 'être' is often avoided because of its use as an auxilliary, one would expect the same to be true of 'avoir' and that indeed is the case, 'posséder' as well as 'offrir' are used.

The verb 'faire' is also a (modal) auxilliary, but is equally very freuently used in set expressions like: 'faire double emploi', 'faire illusion', 'faire grâce de' - and dozens more besides. So in the sense of 'to make' a better choice would be 'effectuer', 'entreprendre': 'on effectue un voyage', 'on entreprend ou poursuit des recherches'. For the act of making, 'créer' may be appropriate: 'he made a garden' = 'il créa un jardin'.

The verb 'aller', now also an auxilliary in expressions like 'nous allons voir' is often replaced when real movement is involved by 'se rendre' or even 'voyager'. An example:

Le président Herriot, qui se rendait à Vannes pour y prononcer un discours officiel, se trouva immobilisé pendant plusieurs heures dans la gare d'Ingrandes.

Another verb that ought to give rise to no problems is 'dire'. Thus, students will write: 'Le journal dit...' or 'le gouvernement dit...'. This seems artless, crude and somehow wrong, without one's quite being able to say why. However French possess a whole raft of verbs each of which has its own special use: 'déclarer' = 'to say in public', 'proclamer' = 'to say in public in the hope of being heard', 'annoncer' = 'to reveal something not previously known', 'affirmer' = 'to make a statement while claiming it to be true', 'prétendre' = 'to put and defend a point of view', 'soutenir' = 'to forward an argument'. In addition to the aforementioned, there are periphrases like 'donner à entendre à qqn', 'laisser croire que'. Whereas English has a large vocabulary, it is not necessarily an error of style to use 'simple' words like 'to have', 'to go' and 'to say'. Though French may have a smaller vocabulary, such words as it does have at its disposal are, it seems, used more, and not using the 'mot juste' - choosing the right item of the available list - gives a peculiar effect of impoverishment and foreignness.

Just one more example: the verb 'donner' may (indeed) mean 'to give', but 'il m'a donné un cadeau' sounds wrong - or at least uneasy - for 'il m'a offert un cadeau' or the sentence best rendered as 'Shall I gift wrap it?': 'C'est pour offrir?'.

The ideas just outlined were born of the reflection that what seem like very obvious words - what may, indeed, once have been the 'best' word to use, live on abroad in a way they no longer do in France. Thus, 'ferme' and 'fermier' for 'farm' and 'farmer'. Only rarely are these used in ordinary conversation on in the media. It is probably statistically the case that 'exploitation' and 'agriculteur' are the most used terms. No doubt this is a manifestation of a well-charted willingness among the French to incorporate scientific or learned terms into ordinary discourse. Another similar pair are 'université' and 'faculté': both terms should be used, though students will prefer the more 'English' 'université'. If asked, would one say 'je suis professeur' or 'je suis dans l'enseignement'? Although one might say 'je suis prof(esseur) de français' alongside 'j'enseigne le français'. Periphrastic expressions (like 'établissement scolaire' rather than 'école') will be examined in a moment.

Martinet rightly says that a language is an analysis of reality, because each language divides up reality differently. But we do not always find cognizance taken of this in teaching. Thus the (obvious) word for 'book' is 'livre'. Yet this ignores a whole series, some of which might be considered synonyms for 'livre' and others most definitely would not: *livre, tome, volume, ouvrage, manuel, cahier, calepin.* There is a list of criteria in each case (here: printed or not, one of a series or not, hinged at top of side etc. etc.). One more totally random example before we press on: the English pair 'pond'/'lake' are distinguished by size. The French series 'étang', 'bassin', 'mare', 'lac', 'pièce d'eau' are distinguished in addition by the criteria: beautiful or not, natural or artificial.

Meaning does not always reside within single words

Martinet talks of the 'double articulation' of language. Sounds go together to make words, and words go together to make sentences. This 'double' articulation does not, in fact, leave us with two levels of analysis, but three: phonetics, lexis and syntax. In fact, though, there is an important and neglected missing level. Words combine to make meaningful units in exactly the same way as sounds do. These syntagms function within the sentence like words, but are not listed in ordinary dictionaries or much taught. We are familiar with the X de Y structure. Here are a few chosen from a text:

voie de passage; Parlement de Bretagne; quartier de la cathédrale

However, many of these syntagms are such frequent collocations that they may be considered lexicalised:

chemin de fer, salle à manger, boîte à lettres etc.

Not only are there noun collocations, of course, but also verbal phrases which are, perhaps, less well understood:

prendre sa retraite, se rendre compte, s'inscrire en faux etc.

Sentences like the following are likely to give rise to problems:

L'état y gagnerait certes, pour qui une opération de transferts initialement neutres se solderait finalement par des rentrées nettes. Mais ni le bien-être des enfants ni l'égalité sociale ni trouveraient leur compte.

There are a number of of frequent tropes in these collocations: one is like 'étoffement' or 'padding out' in translation:

parents = *parents d'élèves*

The other is a kind of periphrasis similar to that examined below under 'elegant variations':

école = *établissement scolaire*

Principals will then, of course, be called *'chefs d'établissement'*.

Those raised on Fowler's 'The King's English' will recall the strictures he reserves for 'elegant variations'. By this, he means finding another, less obvious way of saying something, to avoid frequent repetition. In this matter, French and English are at variance. It is a principle of French style that repetition should be avoided, and the rule is drummed in at school. At one level, this means that there are known equivalences, much overused in journalism:

la langue de Molière	*le français*
la langue de Shakespeare	*l'anglais*
le métal jaune	*l'or*

l'hexagone	*la France*
l'auteur du Cid	*Corneille*
le septième art	*le cinéma*
nos voisins d'outre-Manche	*les Anglais*

One is at liberty not to like these, but one will not get far reading if they are unknown.

Part of the problem may stem from the fact that in the English-speaking world, first-(native-)language teaching lays considerable stress on self-expression and originality, whereas we are dealing in French with a target language whose culture would give much greater emphasis to competent conformity. The idea that one is free to put words together in any conceivable combination is romantic, noble, perhaps, but misconceived: sentences like: 'Les briques boivent du vin mauve' are rare except in poetry. In practice, the range of different vocabulary items a given word collocates with is restricted. Often, one word will suggest another:

parvenir à un **accord** = se mettre d'accord
conclure un **accord** = se mettre d'accord
signer un **accord** = se mettre d'accord
un **accord** est intervenu = un accord s'est produit
réserver un **accueil** favorable à = approuver
réserver un **accueil** chaleureux à = souhaiter la bienvenue/approuver
faire **appel** à (des compétences) = les invoquer/exploiter
donner l'**assurance** de qqch à qqn = assurer qqn de qqch
s'**attarder** à faire qqch = y passer du temps
porter **atteinte** à = faire subir un préjudice
faire/prêter **attention** à qqn/qqch = écouter, étudier
adopter une **attitude** vis-à-vis de = agir de telle ou telle façon
ressentir/éprouver un **besoin** = désirer
le **bruit** court = la rumeur circule
brûler des étapes = aller rapidement à son but
dans le **cadre** de = dans le contexte de
revêtir le **caractère** de = avoir le caractère de/être
se porter **candidat** = poser sa candidature
poser sa **candidature** = postuler un emploi
donner **carte** blanche à qqn = lui donner la liberté d'agir à sa guise

donner libre **champ** à qqn = ne pas les gêner ou contraindre dans leurs décisions
d'un **commun** accord = avec l'assentiment général

One could list hundreds of examples of these 'expressions figées' half way between word and phrase without being exhaustive. In part, the difficulty is that it is difficult to draw a precise line between habitual collocations and locutions or gallicisms. How, for example, might one qualify the following?

*rendre l'**âme** = mourir*
*jeter l'**ancre** = s'arrêter*
*lever l'**ancre** = partir*
*ne pas être dans son **assiette** = souffrir d'un malaise*
*chausser ses **bésicles** = mettre ses lunettes*
***brûler** des étapes = aller rapidement à son but*
*à **cor** et à cri = avec beaucoup de bruit*

It would be wrong to haggle over the usefulness of these expressions: if you are reading about elections without knowing that 'aller aux urnes' means 'to vote', you have problems, and any authentic material will contain this kind of expression.

Often, habitual collocations are a manifestation of the French predilection for nominalisation. Although our closely related western-European languages have the same parts of speech, it is a regrettable by-product of the translation mentality that seems to have survived the death of translation as a widely-used academic exercise that students expect to be able to use the same part of speech in the target as in the source language - verb-for-verb, noun-for-noun and so on. Only too frequently, where a verb might plausibly be used, French prefers a phrase made up of a noun and a (frequently used - a rather neutral) verb:

***apporter** des modifications à*	*modifier*
***avoir** recours*	*recourir*
***avoir** la conviction*	*être convaincu*
***donner** l'assurance*	*assurer*
***donner** avis*	*informer*
***donner** son accord*	*approuver*
***donner** lieu à*	*causer, susciter*

effectuer *un recensement*	*recenser*
émettre *le vœu*	*souhaiter*
être/se trouver *dans l'impossibilité*	*ne pas pouvoir*
être *en mesure de*	*pouvoir*
faire *l'acquisition de*	*acheter*
se livrer *à l'examen de*	*examiner*
opposer *un refus à*	*refuser*
porter *atteinte à*	*nuire*
porter *qqch à la connaissance de qqn*	*informer*
prendre *en considération*	*tenir compte*
prendre *note, acte*	*noter*
venir *à expiration*	*expirer*

Some conclusions

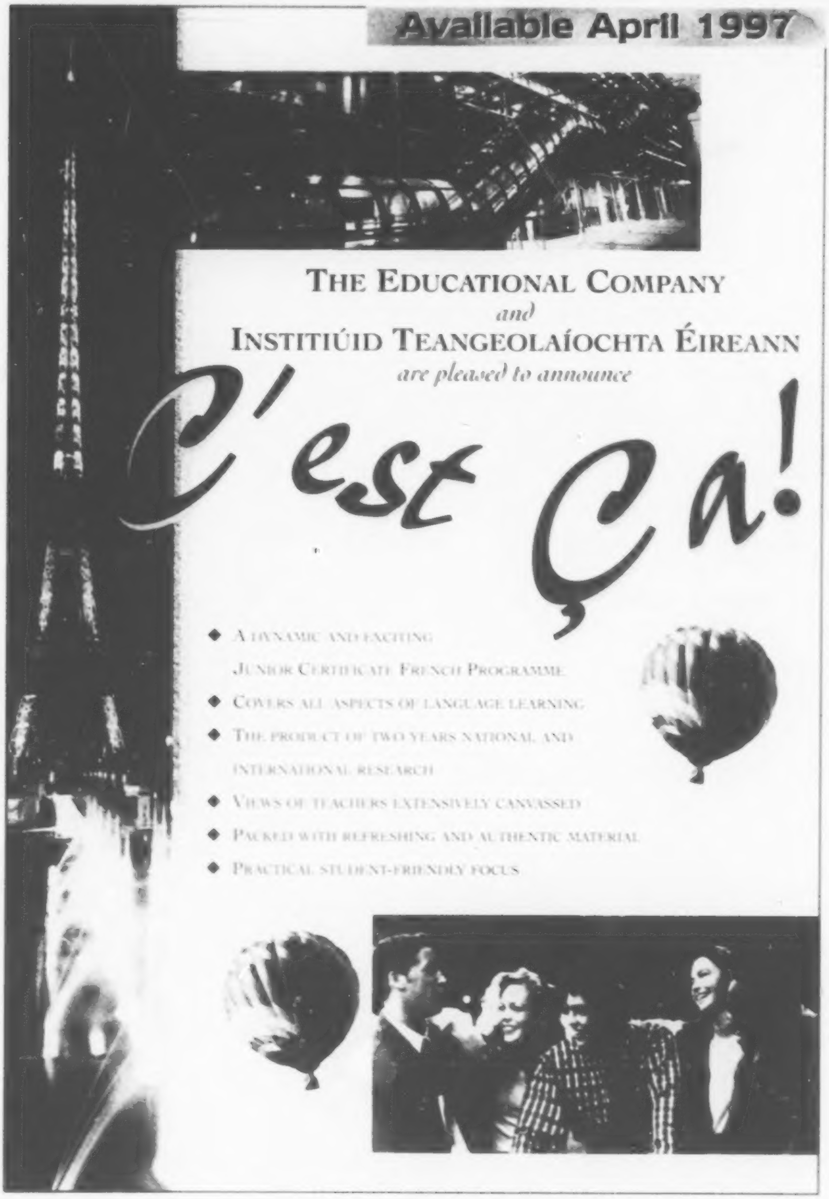
There are some aspects of the vocabulary problem which have not been considered here in order to make the exposition simple. Among the dimensions not explored are things like the fact that French is characterised by a complex system of registers: not only may students have to deal with a high-flown or administrative style, but also with a familiar register. The view that a good neutral style is best to start off with does not make much sense when one considers that any contact with France will bring them into contact with both. To say that 'billet' is the best all-round word for ticket, for example, does not make much sense when both the words 'ticket' and 'titre de transport' are in official use. Similarly, it is unlikely that any student visiting France could long be insulated from the spoken register of French. However, these considerations - important as they are - in no way detract from the two main points made here: the notional 'obvious word' may well not be, and much current vocabulary is accounted for by syntagms or groups larger than the word.

There is clearly a vocabulary deficit among our students on intake. It has, in our university, not been been made good three or four years later. The classic advice is to encourage students to keep a list of words they meet and do not understand. In many ways, such a list will be inadequate, because of being insufficiently cross-referenced. A good way round this is by the use of a flexible data-base. However, where equipment or computer literacy are lacking, structures or groups of words around a nucleus are needed. For example, around 'vouloir' one might group 'émettre/formuler le vœu' and perhaps 'témoigner la volonté de', and alongside this group 'désirer', and 'souhaiter', and around them 'exprimer le/un désir', 'exprimer le/un souhait'. Similarly, around 'chemin de fer', the adjective 'ferroviaire' and the expression 'voie ferrée', linked to 'réseau ferroviaire', 'grandes lignes'. To 'train', we might link 'TGV', 'rame', 'express', 'autorail', 'omnibus' and 'convoi' as well as syntagms like 'train de marchandises', 'train de voyageurs', 'train direct' and so on. As well as linking words, it is often necessary to compare and contrast as in 'légal', 'légitime', 'juridique', 'conforme à la loi', or in the series 'fin', 'bout', 'terme', 'achèvement', 'parachèvement', and the slightly different adjectival serie: 'fini', 'terminé', 'mené à bien', 'mené à son terme', 'achevé', 'parachevé', 'parfait', 'perfectionné'. In these cases the words are not always interchangeable, but close enough for it to be worthwhile considering them together.

Picture dictionaries, like the excellent, but now aging Duden, or the more modern Harraps Visual list related words in close proximity and are invaluable for concrete vocabulary. But more than concrete vocabulary is required.

Although words need to be grouped together in structures, there is no single structure that is objectively 'right' or 'best'. That is why the flexible database would seem not only to be best in practice, but also best in theory. But if boring, old-fashioned paper is to be used, a good starting point is the 'obvious' word mentioned earlier, and which may, or may not be the best way of saying a particular thing. Thus, around 'ferme', would cluster 'exploitation', 'exploitation agricole'. 'Récolte' (=the product of the land and the end of the season) could be contrasted with 'vendange' (used only of grapes) and 'culture' (a certain category of plants while growing). The series 'viticulture', 'pomiculture', 'sériculture', 'pisciculture', 'ostréiculture' could follow. Diverse syntagms involving 'élevage', could figure, with the pairs 'vache'/'race bovine', 'cochon'/'race porcine', 'mouton'/'race ovine' indispensable, not only for dealing with Brussels, but even reading the economic press.

The point of this system is not that it brings instant enlightenment - that would be too much to hope or promise - but that it holds out the possibility of ultimate enlightenment because it can grow. Whereas the linear word list just gets longer, and ultimately becomes unwieldy and has to be discarded, this kind of vocabulary work gets denser, but even after several years is still centred around the same basic areas of meaning, of nuclei.



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Electronic texts and concordances in the translation classroom

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This article examines some of the ways in which corpora and concordancing tools can be used in the context of LSP teaching, with particular emphasis on the specialised translation syllabus. It aims to demonstrate that a corpus-based approach to translation is a useful and perhaps even an essential complement to the more conventional dictionary-based approach. The increasing availability of large volumes of text in electronic format and reasonably priced tools for exploring and analysing texts may prove to be invaluable in the teaching of translation. I have already used some of these resources in the translation classroom and found that students are i) extremely receptive to the notion of applying modern technology to translation practice and ii) much less likely to make incorrect terminological choices when they source their material in electronic text.

The first section of this article contains a profile of translation students at Dublin City University and outlines the level of expertise that they are expected to have. Normal translation practice is described, as are some of the problems encountered by students when trying to locate the meaning of a word or phrase in one language and its equivalent in another through consultation of dictionaries. The following section describes the types of electronic resources that are now available to students at Dublin City University and it suggests a number of ways in which they can be usefully exploited. This section also includes a description of the software tools that are available. The final section contains examples of how these resources and tools can be exploited in order to retrieve information about a term, its meaning and its usage.

Introduction

The students under discussion are final year students on the Applied Languages Programme, and postgraduate students on the MA in Translation Studies Programme at Dublin City University. These students are required to translate, into their mother tongue, specialised texts dealing with aspects of what we broadly term economics, and science and technology. While first and second year undergraduate students are given 3 hours a week of lectures, in English, on economics and science and technology as background to the specialised subjects that they encounter in the translation classroom, final year and masters students are expected to source their own background material. Frequently, these students have little prior understanding of the subject matter and they are encouraged to read up on the subject before attempting a translation. They have a number of ways of doing this. If translating a text on natural gas heating systems, for example, they may call into their local gas company office to speak to one of their experts. They may know someone who is working in the area who can explain the basic concepts to them. They may find what they need in the university library. In addition to sourcing background documentation, students are encouraged to locate comparable texts in their mother tongue. If, for example, they are translating product specifications for a cooker from French into English, they should look for similar specifications in English.

When students have reached an understanding of the subject matter of a text, they then start the translation process. Their first step is to identify equivalent target language terms for terms in the source language text that are unfamiliar to them. They generally consult a bilingual general or specialised dictionary for this purpose. They are advised to double check on the appropriateness of the equivalents retrieved by consulting monolingual dictionaries in the source and target languages. However, even when students follow the recommended procedures, a number of problems arise with the consultation of dictionaries. The dictionaries which they are likely to consult can be broadly subdivided into the following categories: monolingual general language dictionaries, monolingual specialised dictionaries, bi- or multilingual general language dictionaries and bi-or multilingual specialised dictionaries.

Monolingual general language dictionaries will provide a definition of the entry, multi-word variants of the entry. They may also contain some phraseological information, indicating some of the typical collocates for the entry. However, monolingual general language dictionaries are of limited use in specialised translation as they will rarely contain definitions of specialised terms; where definitions of technical terms are provided, they tend not to contain sufficient detail. As with monolingual general language dictionaries, monolingual specialised dictionaries provide definitions; they are likely to indicate multi-word variants of the term and they may indicate associated terms. However, they do not provide phraseological information, leaving students to guess the correct collocate and all too often, they get it wrong. The layout of entries in general and specialised bi- or multilingual dictionaries tends to be fairly similar. Equivalents are provided for the entry itself and for multi-word variants of the entry. In the larger dictionaries, phraseological information will also be provided. However, no definition is provided, with the result that students frequently mistranslate, selecting the incorrect reading when more than one is provided.

While we can draw our students' attention to these issues and alert them to potential problems which at least makes them more wary when consulting dictionaries, there are many instances where dictionaries will simply not contain the information which students are seeking. Take acronyms (i.e. abbreviations such as GATT, SSA, SIPTU) for example which are particularly common in economics texts. If the acronym has only been coined recently, it will not appear in a dictionary and it is possible that native speakers may be unable to help. The only option remaining is to locate comparable texts in the hope of retrieving the full form of the acronym. This is time consuming and may not even yield the desired result. Take for example, the French acronym TIPP, which this author first encountered in a newspaper article on budget proposals in France. It did not appear in the Dictionary of Acronyms. French native speakers were unable to help. The text itself provided no clue as to the meaning of the word other than that it was likely to be the acronym for a recently introduced tax or levy. Consultation of the Le Monde CD-ROM provided the information. When the levy was first introduced, the full form usually appeared in brackets after the acronym. TIPP stood for a tax on imports of petroleum products (Taxe sur l'Importation des Produits Pétroliers). Another area where dictionaries may be found to be wanting is in the definition of words associated with a new or emerging technology. The meaning of the word may have evolved since publication of the dictionary. Thus, a student seeking a definition of CD-ROM may find that it is defined as being used for the storage of written text whereas it is in fact now used for the storage of sound, film, graphics as well as for the storage of text. Alternatively, the word may simply not appear in the dictionary at all. Take the English term *dongle*, a software protection device that plugs into the back of a computer; this term is not to be found in any of the large range of specialised dictionaries available to students at DCU.

Electronic resources and concordances

This brief sketch of the problems associated with relying exclusively on the conventional dictionary-based approach to translation highlights how important it is to encourage students to look further afield in their search for the meaning of a term or the appropriate equivalent in another language.

In recent years, DCU has acquired a number of CD-ROMs which are proving to be of enormous benefit to students. These resources serve as a one-stop shop for background information on projects for language and other subjects. Students are encouraged to view these electronic repositories as potential terminological resources and to observe the Firthian principle that *you shall know a word by the company it keeps*. In essence, this means that if students examine the way in which a word is used and have sufficient instances of the word in actual usage, an analysis of these instances should enable them to understand the meaning of the word, locate related words and identify appropriate collocates.

We will now look at a number of different methods of eliciting information about a word from a corpus or from a single text. Baker (1995:2) says of a corpus that:

> A corpus now means primarily a collection of texts held in machine readable form and capable of being analysed automatically or semi-automatically in a variety of ways.

The two resources used for this article are Encarta, the Microsoft Encyclopaedia on CD-ROM and the 1992-1995 editions of the Financial Times available on CD-ROM. These are both collections of naturally occurring running text, i.e. the language has not been tampered with or edited.

The software used to retrieve the information is the MicroConcord concordance software developed by Tim Johns and Michael Scott at the University of Birmingham. A concordancer is a piece of software which allows users to retrieve all occurrences of a particular word or phase, known as the *node*, in a corpus together with the segment of text in which the node is located. This segment is called the concordance line and is generally 80 characters in length, i.e. the width of an A4 page, but can be extended if users wish to retrieve information that lies beyond the scope of the 80 characters.

Table 1 Concordance of *coal*

```
are a new generation of advanced coal utilization processes, some of
higher heating value. Anthracite coal has the highest carbon content
 lowest rank of coal. Bituminous coal has even more carbon and a corr
ennsylvania. The best bituminous coal for coking purposes comes from
ects on the environment. Burning coal produces carbon dioxide, among
new clean coal technology (CCT). Coal liquefaction supplies all of th
 South Africa's oil needs. Clean Coal Technologies  CCTs are a new ge
ed in gasification and new clean coal technology (CCT). Coal liquefac
 as improved methods of cleaning coal, fluidized bed combustion, inte
urization. Location of Deposits  Coal is found in nearly every region
 chemical by-products, including coal tar, which are used in the manu
teel producers use metallurgical coal, or coke, a distilled fuel that
dioxide (SO2) emissions from new coal-fired facilities have been cont
pure carbon. Other components of coal are volatile hydrocarbons, sulf
producing coal. Various types of coal are classified according to fix
at, due to the widespread use of coal and other fossil fuels, the amo
 first stage in the formation of coal, has a low fixed carbon content
r in lignite, the lowest rank of coal. Bituminous coal has even more
metric tons. Of this recoverable coal, China held about 43 percent, t
its of lignite and subbituminous coal in North Dakota, South Dakota,
rals that remain as ash when the coal is burned. Some products of coa
Also, sulfur and nitrogen in the coal form oxides during combustion t
oped until the 20th century. The coal reserves of the United States a
issions have dropped even though coal use has increased. All ranks of
arbon content and heating value. Coal may be transformed by further p
antic states. Estimates of world coal reserves vary widely. According
                                 Coal, solid fuel of plant origin. In
```

Table 1 contains an example of the concordance for *coal* extracted from the Microsoft Encyclopaedia Encarta. Once a concordance has been produced it can be sorted in a number of ways, i.e. to the left or right of the node; the concordance for *coal* is sorted alphabetically one word to the left of the node. In a large concordance of several hundred lines, users can select only those patterns which are of interest to them. For example in a concordance of the word *take*, the user may only be interested in occurrences of *take* when by the preposition *of* appears two words to the right of the node. This allows the user to retrieve *take care of, take account of, take notice of* but to exclude *take place, take the dog for a walk, take a driving test.*

A concordancer will also allow users to list all variants of a word, in which case they simply specify the lemma + wildcard. For example, they could specify 'comput*' if they wished to retrieve words such as *compute(s,d), computing, computer(s), computation, computational* etc.

Using concordancers

The next section will look at how concordancing software can be used to retrieve different types of terminological information. The first approach involves identifying the meaning or scope of a term by using the text as the sole resource, i.e. without recourse to a dictionary. This is particularly useful in situations where students simply do not have access to the dictionaries which they would normally require for this purpose.

Students are asked to examine a text manually and to identify all occurrences of a particular term within the text. They are then asked to make a note of any phrases, clauses or sentences that appear to describe the meaning of the term. On the basis of these instances alone, it is often possible for students to write a definition of a term, to identify related terms and locate phraseological information about the term. Students are then asked to compare their result with the definition of the term in specialised dictionaries. They are invariably surprised at how much more complete their own definition is, particularly in relation to related terms and phraseological information about the term itself. Once they have carried out the task manually, they are then shown how the same information can be retrieved much more easily by using a concordancer.

For the purposes of illustration we have chosen to look at the term *coal* as this is a term with which readers will be familiar and should therefore allow them to judge the adequacy of the results obtained. However, the approach is in fact most useful in situations where students are trying to retrieve information about terms which are unknown to them. The concordance for the term *coal* (Table 1) reveals some very interesting information. For example, types of coal are clearly identifiable. If the nouns which appear to the left of the node are combined with the node, the combined result is frequently a subordinate or hyponym of the node. Thus, there are references to *bituminous coal*, *subbituminous coal*, *anthracite coal*, among others. This is a simple means of establishing genus-species relations. It is easy to identify these using a concordancer but a manual analysis of the text for retrieval of the same information would take a lot more time and students might simply overlook some of the references.

When the node is immediately followed by a noun or nouns, the noun(s) which follow(s) is/are the head of a multi-word term relating to coal. Thus, we read of *coal liquefaction techniques*, *coal production*, *coal combustion*, *coal utilization processes*. This gives the reader information about *processes* relating to coal. Furthermore, there are many markers which indicate that the text may contain some definitional information about the node itself. For example, we find: *coal: solid fuel of plant origin*. What follows in the original text, to which the student can refer by expanding the concordance to a full sentence or paragraph, is actually a definition of how coal is formed. In another concordance line we find a reference to *coal and other fossil fuels* so we know that *coal* is a type of fossil fuel.

An analysis of the verbs which co-occur with *coal* will tell the students what types of process *coal* is likely to undergo. Thus, we see that it is *produced, burned, transformed, cleaned, consumed,* all of which is invaluable information to the student looking for the correct collocate. When all of the information which has been retrieved is collated, it can be stored on a terminological record sheet (cf Table 2) for future reference.

Table 2 Terminological record sheet

Term: coal

Grammatical information: Noun, generally in singular form.

Hypernym: fossil fuel.

Definition: Solid fuel of plant origin, found all over the world. Commercial deposits confined to Europe, Asia, Austrial, North America. Peat is first stage in formation of coal. Coal classified according to fixed carbon content. Coal burning produces carbon dioxide, among other by-products. Components of coal include volatile hydrocarbon, sulfur and nitrogen.

Hyponyms: bituminous coal, anthracite coal, metallurgical coal, coke, subbituminous coal, recoverable coal.

Related terms: coal utilization processes, coal-using processes, clean coal technology, coal liquefaction techniques, coal liquefaction supplies, coal deposits, coal production, coal combustion, coal reserves, coal use.

Co-occurs with : formation of, produces, is found, may be transformed, burning, combustion, consumed.

The next time students are asked to translate a text on coal production, they can consult their record sheet to identify appropriate collocates. Coal is *produced*, it is not manufactured. Coal is *formed*, it does not evolve. Coal may be *transformed*, but not converted. The collocates may seem obvious but it is surprising how frequently students allow the language used in a source text to interfere and lead them to use the incorrect collocate in the TL text. The record sheets which students use are generally bi- or trilingual and include equivalents in each of the source languages, information relating to gender, collocates and related terms in the source languages.

The second approach is one which has already been mentioned and entails using a corpus in the same way as one uses a dictionary. There is no need for a concordancer in this instance. Students simply access the corpus and use a key word search to locate the word or phrase they are looking for. This is particularly useful for locating the full form of an acronym, such as TIPP (Taxe sur l'Importation des Produits Pétroliers) which was mentioned earlier, or CCT (clean coal technologies) which appears in the text on coal (Table 1). When students use the corpus for this purpose, they are treating the corpus in the same way as a dictionary; they are simply looking for the full form of an acronym, in order to make a decision about how to treat it in translation.

The third approach involves using the corpus as a means of establishing whether there is a gap between the dictionary definition of a word and the way in which it is used in text; this is an exercise which belongs more in the context of economic or general translation than in that of scientific or technical translation where meaning shifts are less frequent. We have chosen to look at instances of the word *sleaze* (Table 3) to establish whether there has been in a shift or narrowing in the meaning of this word in recent years and also to demonstrate that it is not always appropriate to consult a dictionary particularly when one is dealing with contemporary texts. When students were asked to suggest words that they associated with *sleaze,* they suggested words such as prurient, dirty, sordid, slippery, slimy which was not surprising as these associations were borne out by the readings in the Oxford English Dictionary of *sleaze,* namely:

sleaze (sli:\), *sb.slang.* Back-formation from SLEAZY, SLEEZY a.]
1. Squalor; sordidness, sleaziness, dilapidation; (something of) inferior quality or low moral standards. Also *attrib.*

> **1967** *Listener* 14 Sept.326/2 For all its brazen sleaze, Soho is a pretty fair working model of what a city neighbourhood should be. **1975** *Publishers' Weekly* 29 Dec 68/2 Obviously written to cash in on 'Mandingo', this isn't even readable sleaze: the plot's sloppy, Gilchrist hasn't the knack for writing commercial sex, and the hero is too despicable to be seductive. **1976** *National Observer* (U.S.) 17 July 16 (*heading*) At home with the sleaze king. **1981** *New Yorker* 9 Mar. 104/1 These stores are vast, computerized sleaze centers, where you can buy almost anything - pills, toys, candy, liquor, stockings, pillows and gadgetry.

2. A person of low moral standards.

> **1976** *Telegraph* (Brisbane) 3 Aug 10/3 When I made the mistake of calling them 'sleazy' to their faces, their reaction was outrage. 'Don't call me a sleaze,' said Miss Currie. **1977** *Time* 28 Feb 48/1 Oh God, red nail polish - I look like a sleaze.

The examples cited are revealing. *Sleaze* is directly or indirectly associated with Soho, commercial sex and red nail polish!

Table 3 Concordance of *sleaze*

```
 says there has been no sign of post-sleaze puritanism. 'Not a sausa
 amid continuing allegations of sleaze against ministers, Mr Major wa
ster wishes to calm concerns of sleaze hanging over his government.
h the continuing allegations of sleaze against Conservative MPs by an
affair - a long-running case of sleaze far more serious than any yet
 night to defuse the charges of sleaze levelled against his governmen
is investigating allegations of sleaze against Tory MPs, last night v
ion to shake off the charges of sleaze that have damaged his governme
anished. However, a new form of sleaze has emerged in the 1980s and 1
Britain has a notable record of sleaze A century of hypocrisy in high
g pressure over accusations of 'sleaze' the MPs - who make up the Lab
y way to address the growth of 'sleaze' in government. Amid continuin
vestigate fresh allegations of 'sleaze' after reports connecting two
 with rebutting allegations of 'sleaze', as the national Conservative
government over allegations of 'sleaze' has raised concern about the
to recover from allegations of 'sleaze' against senior Tory MPs, Lord
 polls, enmeshed in charges of 'sleaze' and unable to demonstrate gri
ations in the British press of 'sleaze' in public life have put a las
of the specific allegations of 'sleaze' that have been made against m
-----------          A stench of 'sleaze, cronyism, insider dealing, wa
oming tainted by allegations of sleaze. Speaking at prime minister's
d sinking in a deep blue sea of sleaze.' A former government official
ident in a British tradition of sleaze. Another concern is the curren
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Regular reading of the English newspapers a couple of years ago revealed that *sleaze* was generally being used in rather a different way than the above examples might suggest. Table 3 above contains a random selection of citations of the word *sleaze* from the 1992-1994 editions of the Financial Times, preceded by the preposition *of*.

What does the concordance reveal? There are allegations of sleaze against ministers, charges of sleaze levelled against the government; Britain has a notable record of sleaze. These are scarcely the types of collocates which one would have expected on the basis of the dictionary definition of sleaze. *Sleaze* co-occurs with *cronyism, insider dealing*. There is a tradition of *sleaze* in Britain. Government Ministers, Tory MP's, a former government official are all associated with it. Elsewhere in the concordance, we also find that *In Britain, there is sleaze, not corruption.* This suggests that *sleaze* is the equivalent of *corruption* when it applies to the British government. It appears to be something that involves politicians and members of the Tory government in particular. There are no references to *sex*, to *red nail polish*, to areas like *Soho*. The only physical place with which the word is associated is the Parliament. Further examination of the *concordance* reveals that the word is actually loosely defined:

Three broad categories of illicit practice are evident. The first could be called 'sleaze' - dubious practice on the margins of impropriety, involving relatively small sums and favours.

This confirms our intuitions. *Sleaze* is specifically a *dubious practice on the margins of impropriety, involving relatively small sums and favours.* In the period 1992-1994, all occurrences of *sleaze* in the FT referred to *sleaze* as corruption, with references to cash-for-questions, to members of the government. It is clear from only a cursory examination of the concordances that *sleaze* is being used specifically to refer to corrupt practices. Interestingly, in the 1991 edition of the FT, the word *sleaze* was still being used exclusively to refer to something sordid. There is no reference to allegations or charges of sleaze. It is only in early 1992 that the new meaning starts to emerge. The reason why this particular example is included here is that it clearly demonstrates that, for the translation of texts dealing with current affairs, students would do well to consult parallel contemporary sources when these are available rather than to rely exclusively on dictionaries which may not be sufficiently recent to have taken account of a shift in meaning.

Conclusion

This article set out to demonstrate that the availability of huge volumes of text in electronic form and the development of concordance software for manipulating information which is retrieved from these collections of text can enhance the work which students have to undertake when preparing to translate a text. It highlighted some of the pitfalls of the dictionary approach and showed how corpora can be used as a means of identifying terminological information. The intention was to show that a text can tell as much about a term as any specialised dictionary and even more besides if one considers that a text provides phraseological as well as definitional information. Furthermore, corpora are valuable uptodate repositories which contain information which might never find its way into a dictionary. Concordancing software allows users to retrieve several instances of a word or phrase in order to draw conclusions about its meaning.

Bibliography

Baker, M. (1995). Corpora in Translation Studies. *Target*, Volume 7 (forthcoming).

Financial Times Ltd. (1992-1994). *The Financial Times on CD-ROM*, FT Profile, London.

Microsoft Corporation (1995). *Encarta*. United States, Microsoft.

Simpson, J.A., Weiner, E.S.C. (1989). *Oxford English Dictionary*. Clarendon Press, Oxford.

The Noises made by Poems: an Exploration of the Use of Poetry in the Advanced English Language Classroom*

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> *Any poem or poet worthy of the name must liberate the pure creative force of the human voice.*
>
> \- Anghelos Sikelianos.

Applied Linguistic discussions concerning the structure (stylistics) and classroom use (second language pedagogy) of poetry are strangely silent on the subject of the noises made by poems. By this I mean the acoustic, as opposed to the syntactic, lexical or figurative, texture of texts. Yet, the range of benefits the foreign learner can derive from poetry, in the sphere of oracy, is enormous, extending from oral discussion of grammatical and rhetorical features, to rhythmical reading aloud and the study of metrics as a special case of English intonation. Apart from these practical 'uses' of poems to extend the student's oral and metalinguistic repertoire, there is also the fact that poetry originates in and constantly draws upon the spoken language: "All poetry was originally oral" (Hollander 1989: 4), and, "Some poetry is meant to be sung; most poetry, in modern times, is meant to be spoken" (Eliot 1957: 32). Thus, to ignore the noises made by poems is to deny an essential aspect of their diachronic and synchronic force.

The present paper is concerned with a particular group of (advanced) English language learners and the multiple uses of poetry to cater to their specific needs. Beginning with a brief sketch of the learners and learning targets, I shall proceed to an outline of the theoretical basis of my discussion. This part of the paper will draw on literary as well as applied linguistic theory, but restrict use of the former to writers dealing directly with linguistic matters. Following a more general discussion of the use of poetry in the English language classroom under three headings - metrics, grammatical devices, rhetorical devices - I shall conclude with some suggestions about Auden's "Epilogue", both as a teaching-text and as an object of literary linguistic analysis. Most space in each section will be devoted to the phonological aspects of poetry because, as I have already indicated, this is, at present, an under-exploited area in language teaching.

(1.1) Learner profile

Although the learners about to be described may strike the reader as a rather atypical group, whose metalinguistic needs, in particular, may appear unrepresentative of most English language learners, it should be borne in mind that such students attend courses in Britain and Ireland in increasing numbers every year[1]. It should also be noted that many of the techniques outlined below can be used successfully with younger, less sophisticated and less proficient students, though the teacher's choice of texts may be correspondingly restricted.

The learners in question are undergraduates (or occasionally M.A. students), reading English literature in foreign (usually European) universities, who have come to Ireland for three- or four-week E.S.P. courses. In many of their home universities, degrees in English literature include a historical linguistics component[2]. Such students will have studied English for at least six years at school, often supplemented by private lessons, and will have completed at least one year of their degree courses. They will normally have an adequate linguistic metalanguage and a rudimentary literary one. In other words, they will be able to parse an English sentence using the appropriate terminology and will also be acquainted with such terms (and concepts) as metaphor and irony, but not with the more complex reaches of literary criticism and its terminology.

(1.2) Learning targets

Together with a good grounding in the target language and some metalinguistic vocabulary, the students will have a certain degree of stylistic awareness. Their stated needs will often be grammar revision, oral fluency practice, vocabulary development and an improved ability to read and critically discuss literary texts. Grammar revision, at this level, usually means help with recognition and manipulation of aspect and modality in the English verb system, which is an area that can be fruitfully addressed through literary texts (Berman 1984). Lexical development can also be fostered through literary texts (see, for example, Widdowson 1984), and the requisite metalanguage for discussing literature can be taught (Burton and Carter 1982: 5-6). Poetry will be used to enhance the learners' linguistic and literary awareness, with a particular emphasis on phonology.

(2.1) Theoretical basis

The importance of literature, and in particular poetry, to the understanding of language was emphasised by the distinguished linguistic theorist and Russian Formalist, Roman Jakobson, who argued that poetics (the linguistic study of the 'poetic function' of language) was an integral part of linguistics (1960: 486). An even stronger version of this argument has been proposed by Julia Kristeva, who asserts that, "the proper object of linguistic study is poetic language" (1980: 24-5).

In the sphere of Applied Linguistics, there are several advocates of the use of literary text to further the understanding of language. These include Malcolm Coulthard (1977) and Ann Cluysenaar (1976) in the field of Stylistics and H.G.Widdowson (1984), C. Brumfit and R.Carter (1986) and D. Burton and R. Carter (1982) in the area of Second Language Pedagogy. All of these authors have tended to emphasise lexis and ignore phonology, although Cluysenaar does attempt to relate sound patterns to semantics (1976: 64-66). For all these authors, then, the primary use of literary texts in the classroom is for vocabulary-building.

Coulthard mentions the possibility of attending to sound patterns in poetry, but makes no suggestion as to why such a project might be valuable (1977: 170). Instead, he concentrates on literary conversations as a prime case of written discourse, offering a discussion of *Othello* in terms of Grice's principles (1977: 170). In a similar way, Deirdre Burton focuses on some dialogue drawn from Pinter's *Dumb Waiter* (1982: 89-107) The suggestion appears to be that literary representations of spoken discourse, however stylised, are somehow more authentic, or more susceptible to analysis, than other modes of writing.

Finally, Brumfit and Carter (1986: 6-7) argue that striking sound patterns are not really a distinguishing feature of poetry because 'ordinary language' such as proverbs, nursery rhymes and advertisements, can furnish examples of sound patterning. Unfortunately, two of their three examples originate in pre-literacy (as defined by Ong 1982 or Havelock 1986; see also Attridge 1982: 80), while the third relies on memorability in much the same way as these pre-literate oral texts. The connection between oral texts and poems is an important one, as we shall see, but it does not negate the primacy of sound to poetry; indeed, it underlines it.

The above schematic outline of the various theoretical positions in Stylistics and Second Language Pedagogy is intended to illustrate the following point. Many theoreticians and practitioners are very aware that literature is a major resource in second language learning, but their proposals for exploiting it are somewhat restricted. Among the many uses of literature in second language teaching is training learners to pay close attention to stress and intonation. Literary language may be deviant in terms of both lexis and syntax, but it is difficult, if not impossible, to think of an example of rhythmical deviancy in the sense of an absolute departure from the stress and intonation rules of the spoken language[3]. The rhythms of poetry, instead of departing from the rhythms of speech, often exaggerate these. Whereas deviant syntax, as we shall see (3.2 below), does not serve to highlight normal syntax, the rhythmical pattern of poetry often helps to make the rhythm of speech more transparent.

(2.2) The rhythms of English poetry

The Russian Formalists isolated three aspects of literary language as essential to their project of establishing a rigorous poetics: sound texture, syntax and semantics. They allotted primacy to the first, defining poetry as "speech organized in its entire phonic texture" (Erlich 1955: 212).

With regard to English poetry, T.S. Eliot argued: "The music of poetry, then, must be a music latent in the common speech of its own time (1957: 31), and G.S. Fraser has pointed out that, "Most great English poetry approximates to speech rather than song" (Fraser 1970: 5). David Murray raises the question of the "oral performance [of poetry] within a society where written texts are culturally privileged" (1989: 21). This may partly explain the current pedagogical neglect of the acoustic aspects of poetry.

Derek Attridge provides Eliot's remarks with a scientific basis. Since English is stress-timed and not syllable-timed, "there are no established English metres in which the number of words or syllables is controlled, but in all verse from Middle English to the present the syllable plays a significant *rhythmic* role" (1982: 52 [my italics]). In syllable-timed languages, such as French and Japanese, "the number of syllables in a line is more important than the number and arrangement of stresses" (ibid.: 72). It has been observed that English tends towards an alternating pattern of weak and strong stresses (Chomsky and Halle: 1968: 117), and one consequence of this is "the overriding preference poets have shown for duple metres" (Attridge 1982: 71).

The implications of this for the pedagogical use of poetry in the English language classroom, are quite clear. If English poetry is based on the patterns of English speech, and in particular the alternation of weak and strong stress with the accompanying use of the unclear vowel ([ə] schwa) that many learners find so difficult to acquire[4], then poetry, with its exaggerated attention to these features can help to make them salient.

The two commonest lines of English verse contain four and five beats or stresses[5]. The former is older, deriving from folk tradition; while the latter is more recent and more 'learned' (Attridge: 123-4), however, a 'naturalistic' reading of the latter will often restore it to a duple (4-beat) rhythm.(ibid.: 129). Many English sentences have four main stresses. (Like that one). This basic fact about the spoken language can be made salient to a class of, say, Japanese high-school students, by the simple expedient of teaching them to scan T.S. Eliot's poem, "The Naming of Cats" and then asking them to suggest what the stressed words may have in common. The stressed words turn out to be the main bearers of meaning, so that if we miss out the intervening (mostly) 'grammatical' words, we are left with a series of telegrammatic lines from which the meaning of the poem can easily be reconstructed:

(The) Náming (of) Cáts (is a) sérious mátter
(It) ísn't (just) óne (of your) hóliday gámes
(You) máy-think (that) Í (am as) mád (as a) hátter
(When I) téll (you a) cát (must have) thrée (different) námes

These four lines exemplify not only the lexical word / grammatical word dichotomy enshrined in the English stress system, but also the other major stress-type: contrastive stress with negation (isn't, l. 2) or modality (stress shift from main verb to modal auxiliary: thínk → máy think, l. 3). At the micro-level, the major determiner of word-stress in British English is also semantic. Most words which are not French loan-words are stressed on the root. Thus: nám[e] + -ing suffix[6]. This is just one way in which the sound texture of English poetry can be exploited in the English language teaching classroom.

(3.1) Theory into practice: metrics, syntax, rhetoric

Classroom practice[7] based on the three Formalist tenets concerning what to examine in poetry (sound, syntax and sense, with the emphasis on sound) might proceed in the following manner. Having given some instruction in critical meatalanguage, including the two key formalist terms, 'defamiliarization' and 'foregrounding'[8], and scansion[9], we might turn first to metrics and the other formal features of sound texture, such as rhyme, alliteration, assonance, chiasmus and bond-density (Masson 1967; see also Ekdawi 1990).

Syntax would be examined in context, focusing on the ways in which it forwards meaning, and rhetorical devices could be analysed both as a means of enhancing the learners' appreciation of literary techniques and to improve their lexical knowledge.

(3.2) Auden's "Epilogue": a case in point

Auden's "Epilogue" is a prime example of English duple (four-beat) rhythm, and can be approached in the same way as Eliot's "Naming of Cats", for an initial exploration of stress. In examining the other formal acoustic features, our aim is not to point them out in isolation from their semantic function. We are not teaching our students simply to spot alliteration, but also to consider its significance. Rhyme, for example, may be used to foreground key words or concepts, but it is important, as the Formalists recognized, to be aware that rhyme can equally well be a mere convention, in which case, other aspects of the sound-texture may be thrown into relief (foregrounded) by it, instead of the rhyme standing out against a background of 'ordinary' discourse. In Formalist practice, "The devices of poetry are studied not for themselves, but for their defamiliarizing capacity" (Jefferson 1982: 41-2).

Epilogue

'O where are you going?' said reader to rider,
'That valley is fatal when furnaces burn,
Yonder's the midden whose odours will madden,
That gap is the grave where the tall return.'

'O do you imagine,' said fearer to farer,
'That dusk will delay on your path to the pass,
Your diligent looking discover the lacking
Your footsteps feel from granite to grass?'

'O what was that bird,' said horror to hearer,
'Did you see that shape in the twisted trees?
Behind you swiftly the figure comes softly,
The spot on your skin is a shocking disease.'

'Out of this house' –said rider to reader,
'Yours never will' –said farer to fearer,
'They're looking for you –said hearer to horror,
As he left them there, as he left them there.

A good point of departure is to look at words connected by sound, either within a line, or at line-ends, and how this acoustic association affects, or even alters, their meaning[10]. The first, and most prominent such pair is: reader-rider. The similarity of sounds immediately calls to mind the more usual pairing: reader-writer. It is a reasonable assumption that a central concern of most poets, including W. H. Auden, is not horse-riding, or even travel, but writing, although the choice of metaphor is not without significance, since riding is a swifter mode of travelling than walking, but also natural (or at least non-mechanical). We can distinguish the reader-rider (writer) pair from other, less significant ones, such as 'fatal' - 'furnaces', on (commonsense but also) formal grounds: reader and rider are prominently placed: they introduce the subject of the opening line, first sentence, first verse and whole poem. They constitute the central metaphor (traveller / fearful non-traveller) and reveal the central conceit of the poem: the reader is passive and fearful, while the writer is bold and risk-taking. Yet both are equally vital to the dialogue: the questing rider/writer needs the questioning reader; poetry results from the meeting of the two. Ultimately, however, the reader is a victim of his own trepidation; the writer, a free spirit, can challenge him or leave him behind any time he chooses.

Conveniently for our purposes, sound patterns of various kinds do seem to be the stylistic dominant (Jakobson 1960) of this poem, whereas deviant syntax is minimal[11]. The syntactical structure of the whole echoes the simplicity of the folk tradition in which the four-beat line originates (Attridge 1982: 80). The main syntactical oddity is the ellipsis at the end, where the rider responds to each question in turn, without recalling the questions by repeating part of them. The significance of the singular and plural pronouns in the closing lines might also be raised. The rider orders the reader out; the farer frightens the fearer; the hearer sets horror's own fears to pursue him, and finally the rider asserts his own unitary presence ("he") behind many guises (rider, farer, hearer), and rides (or writes) on, while the reader/fearer/horror remains behind, hopelessly divided and multiplied ("they"); hesitating and thereby lost.

The main rhetorical device is a metaphor: the writer as traveller, taking calculated risks in the face of his reader's caution. Although writer appears to be the tenor of "rider", other vehicles in the poem remain less penetrable. "Valley" has biblical echoes, reinforced by "Graves" and the "tall" (presumably the dead): the valley of the shadow of death, but this valley, although it does appear to put the rider at risk (it can be fatal, under certain conditions), is not exactly the same as the Old Testament one, since it borders on a "gap" where the dead return. A full discussion of the lexical-metaphorical dimensions of the poem is beyond the scope of the present paper. This line of enquiry, however, may prove useful in encouraging the students to explore word-associations in an acoustic context, focusing on connotation, rather than denotation. At an advanced level, it is very important for learners to be aware of this distinction.

Apart from scanning the poem and examining the ways in which the stressed words forward meaning and how this conforms to the rules of stress in English (as we did with the Eliot poem, above 2.2), an advanced group might benefit from two further, related exercises. First, they could be encouraged to clap out the rhythm of the poem, clapping the stressed words more loudly than the unstressed ones, and then they could be asked to consider whether the strong four-beat rhythm evokes anything connected with the message of the poem. The rhythm might, for example, suggest that of hoof-beats.

Auden's "Epilogue" can be read as a meditation on the nature of poetry, which incidentally reflects the importance to it of sound. It is surely significant that Auden does not employ free verse to talk about poetry. In contrast, in "Musée des beaux arts", which deals with paintings, he avoids acoustic ornament, using a form of free verse that sounds almost conversational. Auden appears to be proposing that a highly ornate verse-form is proper to a discussion of poetry. In electing to employ a form where sound patterning predominates, Auden would seem to be arguing implicitly, as I have been doing more explicitly, that the noises made by poems are semantically, as well as phonologically significant.

Footnotes

[*] This paper was originally submitted in part-fulfilment of the requirements of the degree of M.Phil. in Applied Linguistics at Trinity College Dublin, 1995. In its revised form, it was presented at the IRAAL Symposium, "Lexicon and Vocabulary: Theory and Practice", Trinity College Dublin, 25 November 1995.

[1] A wide range of courses in English for Special Purposes (E.S.P.), whether vocational (such as medicine), or academic (such as literature) are available in British Council recognised schools of English in Britain. In Ireland, the availability of E.S.P. courses is more restricted, but such courses are offered by three Department of Education recognised schools: U.C.D. Language Centre, the Language Centre of Ireland and Moyle Park College Summer School. The demand for such courses is high in Britain and growing in Ireland.

[2] In 1994, for example, I taught a group of Spanish and Italian undergraduates at Moyle Park. The syllabus that I devised covered English and Anglo-Irish authors (including Modern Irish authors writing in English) and a component called "Issues in Contemporary Linguistics". Classes under this last heading often focused on newspaper articles reporting such issues as the appointment of Jean Aitchison as Murdoch Professor of Linguistics at Oxford and her inaugural lecture on language in the press.

[3] Hollander (1989: 5) points out, for example, that quantitative verse (the basis of Ancient Greek prosody) cannot occur in English, and I myself have demonstrated (D.Phil., Oxford 1991) that Modern Greek poets attempting to write non-metrical free verse almost invariably slip into iambics, the stress-basis of the spoken language.

[4] Schwa: "The indistinct unstressed vowel sound as in a moment ago" (O.E.D.). Many languages do not have a corresponding indistinct vowel. Two examples of this are Spanish

and Modern Greek, where all vowels are clearly enunciated, whether stressed or unstressed.

[5] Most nursery rhymes exemplify the four-beat line. An example of a poem in five-beat lines is Gray's *Elegy*.

[6] Hiberno-English, however, like French, stresses most polysyllabic words of Latin origin on the final syllable. Thus: hibernáte, for British English híbernate.

[7] I do not intend this term to imply specific techniques, such as pair work or role-play, which may be appropriate to the learners in question. Obviously, with such advanced learners, the sole language of instruction is the L2 (in this case, English), and use of English dictionaries (rather than bilingual ones) is recommended. A discussion of English language training methodology is beyond the scope of this paper, which is concerned with a very specific area of curriculum: the use of poetry with advanced learners. I am assuming that the teaching techniques necessary for the R.S.A. diploma in English Language teaching are the basic stock-in-trade of any teacher dealing with E.S.P. at this level. A lecturing style of teaching would not be appropriate; learner participation is as vital in E.S.P. as it is in all other areas of E.F.L. teaching. Reading aloud might play a greater part in literature-based E.S.P. courses than in some other, more general language-training lessons, but discussion, pair work, group work, role play and so forth remain an important part of the learning process.

[8] Defamiliarization (*ostranenie*): making strange. Art is regarded as defamiliarizing things that have become automatic or habitrual (Jefferson1982:27). Foregrounding: highlighting particular features (such as words) against a background of more subserviant elements (Jefferson 1982:30).

[9] Scansion: "the metrical scanning of verse" (O.E.D.). See also above: 2.2.

[10] It is not my intention in this section to provide an exhaustive list of all the rhetorical features of Auden's poem. Rather, I am attempting to offer a few examples and make suggestions.

[11] I do not mean that deviant syntax is minimal in the context of ordinary language, but in the context of poetry. Auden uses the archaic apostrophic 'O', for example, and non-standard noun-phrases such as, "Your diligent looking discover the lacking". Here, our concern is with sound-effects, and so the relatively transparent syntax (compared, say, to that of E. E. Cummings) makes this a useful text for advanced learners.

References

Attridge, D. (1982). *The Rhythms of English Poetry*, London: Longman.

Berman, R. A. (1984). "Syntactic components of the foreign language reading process" in J.C. Alderson and A.H. Urquhart (eds), *Reading in a Foreign Language*, London: Longman.

Burton, D. and Carter R. (eds) (1982). *Literary Text and Language Study*, London: Edward Arnold.

Brumfit, C. and Carter R. (eds) (1986). *Literature and Language Teaching*, Oxford: Oxford University Press.

Chomsky, N. and Halle, M. (1968). *The Sound Pattern of English*, New York: Harcourt Brace.

Cluysenaar, A. (1976). *Introduction to Literary Stylistics*, London: B.T. Batsford Ltd.

Coulthard, M. (1977). *An Introduction to Discourse Analysis*, London: Longman.

Ekdawi, S. (1990). "Text as song: the oral aspirations of Anghelos Sikelianos", *Byzantine and Modern Greek Studies*, 14, 214-222.

Ekdawi, S. (1991). D. Phil.: "The Poetic Practice of Anghelos Sikelianos" (Oxford).

Eliot, T. S. (1957). *On Poetry and Poets*, London: Faber and Faber.

Erlich, V. (1955) *Russian Formalism: History - Doctrine*, The Hague: Mouton.

Fraser, G. S. (1970) *Metre, Rhyme and Free Verse*, London: Methuen and Co.

Havelock, E. A. (1986). *The Muse Learns to Write: Reflections on Orality and Literacy from Antiquity to the Present Day*, New Haven: Yale University Press.

Hollander. J. (1989) *Rhyme's Reason* (new enlarged edition), New Haven: Yale University Press.

Jakobson, R. (1960). *Questions de poétique*, Paris: Seuil.

Jefferson, A. (1982) "Russian Formalism" in A. Jefferson and D. Robey (eds) *Modern Literary Theory*, London: B.T. Batsford Ltd.

Kristeva, J. (1980) *Desire in Language*, New York: Colombia University Press.

Masson, D. J. (1967). "Vowel and consonant patterns in poetry" in S. Chatman and S.R. Levin (eds) *Essays in the Language of Literature*, Cambridge MA: Harvard University Press.

Murray, D. (1989). *Literary Theory and Poetry*, London: B.T. Batsford Ltd.

Ong, W. J. (1982). *Orality and Literacy: the Technologizing of the Word*, London and New York.

Widdowson, H. G. (1984) *Explorations in Applied Linguistics* 2, Oxford: O.U.P.

Video in the Irish Language Classroom*

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As teachers and learners of less commonly taught languages such as the Celtic languages are well aware, language acquisition can be seriously handicapped by a lack of adequate learning materials compared with what is available for more commonly taught languages.[1] In the case of Irish, there may in fact be a greater variety of pedagogical materials available than for many other lesser taught languages in the U.S. (such as Swedish, Hindi, Polish, and the like), due to the constant population of learners within Ireland, but most available texts target audiences other than North American adults and even those which do have this group in mind are flawed in various ways that limit their usefulness.[2] For example, exercises enabling creative use of the language are virtually nonexistent in even the best of the published texts, and most lack all but the most minimal visual assistance to learners and are often weak in their presentation of authentic language material.[3] Teachers must therefore produce their own exercises and aids to teaching, piece together usable samples of authentic language from various sources, and find ways to integrate them with the primary text(s).

One teaching aid which can help to serve all these needs is videotape, which has seen enormous growth in language teaching in recent years.[4] Increasingly, materials including video as an integral component of a course are appearing for those languages with a large textbook market, as a glance at any catalogue for French, Spanish, or ESL materials will show. Video materials have begun to appear for some lesser taught languages as well, such as Russian, Chinese, and Japanese. But on the whole less commonly taught languages, including the Celtic languages, which are correspondingly less well served by the textbook publishing industry, suffer all the more where audio-visual resources are concerned. Fortunately, however, video is a versatile medium, and even videotaped material intended for other audiences can be adapted for use with language learners.

This paper will report and illustrate recent efforts to incorporate video-based exercises into a first-year university-level Irish class, using a variety of video sources. Examples will be presented and discussed, showing how their use has helped to bring the language alive in class and to provide a synthesis of grammar and vocabulary from the textbook in ways that make them more meaningful and memorable for the students. Not only has student response to video-based activities been overwhelmingly positive, but their oral and written work consistently shows its effectiveness; vocabulary and structures learned and used in these activities tend to be better retained than those introduced through the textbook and traditional drillwork alone and to resurface in spontaneous language use with a higher degree of accuracy.

The benefits of using video materials for language instruction are well known (cf. (Johnson, 1991) (Hennessey, 1995)) and will be summarized only briefly here. Video offers an excellent means of presenting authentic language integrated with visual cues (setting, gesture, facial expression) which not only assist comprehension but provide essential cultural context for the learning task. It offers exposure to a variety of voices, styles, registers and dialects. Visual input has been found to enhance learning for most students (cf. (Felder & Henriques, 1995) p. 24). And because ours is a media-saturated world and most students today have grown up with television, students welcome and sometimes have even come to expect the availability of such learning tools. The motivational factor is by no means a trivial one in creating an effective learning environment.

While listening comprehension perhaps springs to mind most readily as the role of classroom video, it can also be used as a framework for speaking exercises, as we shall see. Materials can vary widely, indeed perhaps should do so. In my classes I use both commercial and homemade tapes, tapes made for both children and adults, and material aimed at both Irish speakers and English speakers, as well as some materials unrelated to Ireland altogether. All have proved to have a place and to elicit positive response from students. Video production by the students themselves is also advantageous in offering a chance for creative use of language free from classroom-imposed structure, yet with time for planning and preparation to maximize the quality of the final product.

It might appear that the level of language in authentic video materials would be beyond that of students in a beginning class. But in fact, appropriateness to level is determined as much by the activities designed to go with the video as by the language it contains, and anything can be useful at any level, as long as we remember that full comprehension is not always necessary--a valuable lesson for learners to have in any case. Table 1 provides a list of possible activity types for use with video, including activities for various skill levels from the simplest recognition exercises to more creative advanced-level language production. Discussion of specific examples from my own classes at the University of Minnesota follows.

TABLE 1

Sample Video Activities[5]

Recognition
Raise hand/clap/snap fingers when a sound/word/grammar form is heard
Write specific forms heard
Circle forms on handout as heard
Order dialogue or event cards

Matching
Dialogue to picture
Dialogue to character
Adjective to character
Synonyms to words heard on video

Listing
Everything you see on screen
Description (characters, places, background, etc.)
Actions--various tenses
Cultural differences

Completion
Cloze synopsis of plot
Missing dialogue fill-in
Event charts, timelines
Information charts (for news shows, commercials)

Creation
Write dialogue (or half dialogue) for segment of film shown without sound
Write monologue for character who doesn't talk much
Write narrative for missing middle of video
Write ending (before viewing)
Rewrite for character of opposite sex/different age/different setting, etc.
Predict outcomes of individual scenes
Write voiceover commentary
Novelization of film

In the very first weeks, I play video segments without sound to introduce the class to physical aspects of the cultural setting and to provide a culturally appropriate stimulus for using the vocabulary they are acquiring. One useful segment is the opening of a recently broadcast RTÉ soap opera, *Ros na Rún*, set in Dublin and the Connemara Gaeltacht. Students are asked very simple questions from the first couple of lessons of their text: *An bhfuil siad sásta?* or *Cá bhfuil siad?* which they can answer with single words (*Conamara, an Ghaeltacht, Baile Átha Cliath*) or with limited variations on their first simple sentence type: *Tá sí sásta, Níl seisean sásta,* etc. This provides contextualized pronunciation practice which is meaningful but still simple enough to be non-threatening. Students are also asked to watch and simply list (in Irish) everything they see on the tape. Then in a follow-up exercise, they compare notes, and recheck for the objects that their classmates found but they themselves may have missed. Two minutes of tape can easily generate 20-30 minutes of classroom activity.

Of course, for this naming exercise, any video sequence at all could be used. I have also used sequences from the commercial film *Poitín*, but since the sound is off, the language of the script is actually irrelevant, as long as the scenes are visually appropriate. Any number of films made in Ireland and readily available in any video shop could provide equally useful sequences.

Shown with sound (and subtitles, for absolute beginners), the initial episode of *Ros na Rún* also works well for simple guided listening activities, some of which are illustrated on the exercise sheet in Appendix 1: picking out new Irish vocabulary through the subtitles, identifying English vocabulary common in Gaeltacht conversations, identifying characters by name and dialect. Most other programmes or films could be similarly adapted.

Films in Irish can also be used almost immediately for selective listening practice to help with sound recognition and discrimination. For instance, the distinction between palatalized and velarized (broad and slender) consonants always troubles beginning learners of Irish. Show the class a few minutes of tape and ask them simply to raise their hands or snap their fingers when they hear a particular sound. Or divide the class in half, one half to listen for broad /L/, the other for slender /L´/. At more advanced stages, they can write down the words they hear that contain the target sounds.

Homemade videotapes are also useful early on in a course for exposing students to a variety of greetings, and for introducing students to traditional Irish music and sean-nós singing. I have also excerpted a series of greetings by different individuals and edited them into a single sequence showing the variety of greeting forms that can be used to accomplish the same function

(*Dia dhuit, Dia is Muire dhuit, hello, cén chaoi a bhfuil tú?, cén chaoi a bhfuil tú ag coinneáil?, cén chaoi a bhfuil an chraic?* etc.)[6]

Materials designed for children can also be a rich source of language for learners. Children's books have been a staple of language learners' reading repertoires for years, and children's video can offer a similar tool for the spoken language. Most students enjoy cartoons, which introduce an element of fantasy that can also be refreshing. Cultural authenticity is not a consideration here, of course, but the extensive visual cues and simplicity of cartoon language can be a powerful learning aid. I have used a French cartoon, *Bouli*, which has been dubbed into Irish for Gaeltacht children, in a very popular classroom and language lab exercise[7]. It is a four-minute segment, on which we spent a 50 minute class period and could easily have spent longer. After an initial viewing of the cartoon and brief discussion of what the class was able to understand of the story, they were given a partial script (see Appendix 2), with words they had previously learned omitted for them to identify and fill in during repeat viewings. For the new vocabulary provided in the script, opportunities for guessing meaning from context were given. The characters all have different accents, providing an opportunity to introduce the class to dialect variation and notice distinctive features of other regional variants in both accent and vocabulary.

A number of commercial films available from Cinegael in Connemara provide more ambitious material for classes.[8] At the beginning level, apart from the vocabulary and sound-identification exercises mentioned above, these must be shown with subtitles, but can still be useful teaching tools, apart from the obvious cultural value. I have shown the feature film *Poitín* over a period of three to four days, to generate simple discussion in Irish of who's who, predictions of what will happen next, inferences to be drawn from the scenes, etc. If desired, closer follow-up viewing of short segments can focus on the language itself--identifying occurrences of particular grammatical patterns the class has been studying: specific tense forms, the genitive case, verbal noun constructions, inflected prepositions, and so on, depending at what point in the course the film is shown. For some of the dialogue, students can also use subtitles as a starting point to reconstruct what the Irish dialogue might have been, even if their listening skills are not yet at a level to permit them to understand the entire message without the aid of the subtitles. After discussing possible ways the speaker might have conveyed the content of a particular line of subtitle, listening again can help focus their attention so that they can pick up more of the dialogue than they did on the initial viewing and see how close their own attempts to produce the Irish were.

As mentioned earlier, materials unrelated to Ireland can also be of value. I have had success in eliciting student-generated dialogue using a tape of pantomimes called *Speakeasy,* (Silverson, 1983), originally prepared for ESL students. These materials provide a structured way of generating oral language, which can be helpful in overcoming student shyness and reluctance to speak at the early levels of language learning. The pantomimes are intended to be culturally neutral, to let learners fill in from their own imaginations, and since they are also language-free, it is not a difficult matter to adapt and translate the accompanying text materials. Depending on the level of the students and the needs of the class, the text provides from two to five hours of activities for each two-to-three-minute segment. A first viewing is followed by general discussion of the situation depicted (what did you see? what happened?). The scene may then be re-viewed, starting and stopping to discuss events, motives, etc. in more detail. Then the class reconstructs in various stages a dialogue to accompany the scene. One sample which I have used successfully with Irish classes involves a pair of wallflowers at a party, the other takes place in a library. The sample handout in Appendix 3 shows some of the activities we have used with the library scene: ordering events, choosing appropriate language for specific events, creating other ways of conveying the message, and finally creation in pairs of an entire dialogue to accompany the scene, which the authors can then enact as role plays. A number of creative dialogues have emerged from these exercises, including some from students whose spontaneous language use was much more limited in earlier work; the structure and context provided by the video seemed to help bring them out of their shells and allow them to stretch their knowledge of their new language in ways they were normally more reluctant to do.

Finally video production as a class activity should not be overlooked. Student skits have been a popular component of many language classes at the University of Minnesota for years, and, depending on details of the assignment, can be used at any level. They encourage students to work cooperatively in the planning and production of the skit, encourage creative use of the language free from classroom-imposed structure, and in general are fun for the students to produce and watch (at least after the initial shock of the assignment wears off). Skits may be improvised or scripted, taped in class or outside, structured (e.g., as a newscast, or a soap opera) or completely free as to content. I use skit assignments in the second and third quarters of my course, leaving students free to choose who they work with and what they do. I ask only that they memorize rather than read their lines, and that they provide me in advance with the idea and some preliminary script material so that I can assist with any new language they may need and head off overly ambitious efforts that require language too far beyond their abilities. They may tape the skit either in the university's language media center or on their own. The results have often been quite clever, and some have even proved usable as teaching tools in subsequent classes (with students' permission). One, for example, based on the skit assignment itself and the students' preparation for it, presented several student-generated mnemonics for remembering vocabulary. Another, drawing on a number of cliches from the textbook and various classroom exercises done earlier in the year, provides a short dialogue consisting of several successive sentences using the copula, which could serve as listening practice for future classes studying that construction.

In using video a number of considerations must be taken into account, from choice of appropriate equipment for the materials and class to preparation for the possibility of an equipment failure in the classroom. For those new to classroom video, Table 2 outlines some of the factors to be considered, and includes an all-purpose outline to help structure video-based activities.

Over a fifteen year period teaching Irish at the university level in the U.S., I have moved like many others toward incorporating video supported activities at a number of points during a year-long language sequence. Gradually the class has shifted from one in which the only visuals were pictures cut from magazines to what one recent student described as a "multi-media extravaganza". Since video materials made explicitly for instructional purposes are non-existent, this has meant scrounging and adapting materials created for other purposes. It is a challenging and time consuming process, and has been accomplished at a slow rate, but student response, increased speaking, and improved retention of the language covered in these lessons easily repay the effort.

TABLE 2

Factors to consider in creating and using videotape in class

Equipment selection

1. Home video cameras work well for simple tasks. Sound can be improved by using microphone jacks.
2. For dual screen, titles, and other effects, a special effects generator/video switcher is needed.
3. For playback, be aware that video formats differ by country and maker. Be sure your equipment is compatible with the tape you have, in type, size and format.

Type	**Size**	**Format**
a. Reel-to-reel	Varies-usually 1/2"	Uniform
b. Cassette	i) 3/4" (U-Matic)	i) NTSC (N. America)
	ii) 1/2" (VHS, BetaMax)	ii) PAL (Ireland, Britain)
		iii) SECAM (France. E. Europe)

4. Screen size is a concern for playback monitors. In general, a 19" screen can be viewed comfortably by no more than 20-25 students. For larger groups, use two monitors, or video projection with a large screen, if available.

Equipment management

1. Familiarize yourself with the equipment *in advance*. Practice using it before class to avoid delays and basic operation problems.
2. Preview material before using it. Determine how much can be seen from the back of the classroom. Establish sound level.
3. Counter numbers are useful for finding points in mid-tape. Be aware, however, counters vary from maching to machine (see 1).
4. Tapes recorded on Extended Play or Long Play cannot be used with all equipment. This is especially a problem with multi-format machines. Use caution in preparing materials.
5. In playback never leave the pause button on longer than about 60 seconds; to do so may damage the tape.
6. Rewind videotapes after use for correct storage.

Classroom management

1. Be prepared for equipment emergencies. Be ready to summarize or describe tape, or have a backup activity planned.
2. Consider the most effective use of the tape. How many times will students view the tape? How will you prepare them for viewing? How will they use what they have seen?

One format for a 3-5 minute segment (adapted from Silverson (1983)):

- a. Prepare class for viewing (e.g. prewriting on a topic)
- b. First viewing (no stops).
- c. General comprehension activity.
- d. Second viewing (planned stops with group activities).
- e. Reinforcement activity.
- f. Third viewing (no stops).
- g. Activity to exploit the tape's language/information.

Appendix 1

Ros na Rún

I. Focail Nua

(Great) Famine:

manager

sweets

congratulations

ears

II. Focail Bhéarla:

III. Canúintí eile. Cé na daoine a bhfuil na blasanna seo leanas acu?

blas Dhún na nGall

blas Chiarraí

blas Bhaile Átha Cliath

blas Chonamara

IV. Cé hiad na daoine seo?

Suzy	an bainisteoir nua
Mícheál	an rúnaí i Mil Rí
Seán	ag obair ag Raidió na Gaeltachta
Caitríona	ag iarraidh a bheith ina bhainisteoir
Síle	múinteoir scoile i mBaile Átha Cliath

Appendix 2 - Bouli

Bouli: O, tá na cnónna seo blasta. Deirim go n-íosfaidh mé _______ _______ acu. Bíonn deifir ar na _______ dhóiteáin _______. Féach é seo! Thit seo den inneall dóiteáin. An first aid kit! An steiteascóip! Tada ---- Tada ---- _______!
Bouli-Punk: Hé Bouli! An tusa _______ _______ anois?
Bouli: Is mé.
Bouli-Punk: _______, féadfaidh tú _______ a scrúdú. Níl rud ar bith cearr liomsa.
Bouli: O!
Bouli-Punk: Cad é atá ann? Cad é atá cearr? An bhfuil sé _______ _______?
Bouli: An croí. Níl sé _______.
Bouli-Punk: _______ _______ an-tinn?
Bouli-Leadóg: Dheabhais! Céard atá oraibh?
Bouli: _______ an croí go maith. Níl an torann ceart uaidh.
Bouli-Punk: _______ an ceart _______ Bouli. Ní airím go maith. Oh! D'fhéadfainn a bheith an-tinn!
Bouli-Leadóg: Tabhair dhom go bhfeice mé. Is fíor dhuit. Dheabhais, níl an torann _______ ar an _______ seo ar chor ar bith!
iad uilig: Teara anuas, a Bouli-_______! Tá Bouli-Punk an-_______!
Bouli-Eitleán: Ach céard atá air?
Bouli-Leadóg: Dheabhais, tá an croí _______ _______. Seo. Éist leis.
Bouli-Eitleán: Ach, is fíor dhuit. Níl an croí _______ _______ ar chor ar bith. Céard a dhéanfaidh muid?
Bouli-Leadóg: Is _______ _______ _______ é gur dochtúr é Bouli.
Bouli-Eitleán: An dochtúr thú, Bouli?
Bouli: Ummm....
Bouli-Leadóg: Hé. Seo é do chás. Abair linn _______ a dhéanfas _______.
Bouli: Bhoil, fan _______. Déanfaidh muid--, ní 'in é. Oh! Sin é. Cuirfidh muid umm-- bindealán air.
Bouli-Eitleán: Tá go maith, Bouli. Tosóidh muid.
Bouli: Tá muid críochnaithe!
Bouli-Leadóg: Tiocfaidh biseach ann anois, cinnte. Éistóidh muid len a _______ _______ anois, go bhfeicfe muid _______ _______ sé ceart.
Bouli: Bhoil, a dhuine chóir. Cén _______ a n-airíonn tú anois? Níl aon mhaith sa bhindealán. Tá sé níos _______.
Bouli-Leadóg: Triailfaidh muid an _______.
Bouli-Eitleán: Sin é. _______ amháin. Dhá _______. Trí _______.
Bouli-Punk: Stop! _______! Níl me go maith!
Bouli-Leadóg: Dheabhais, níl ach _______ _______ fágtha le triail.
Bouli: Agus céard é?
Bouli-Leadóg: Fan, tá sé _______ anseo.
Bouli: Céard é féin?
Bouli-Leadóg: Séard atá ann, ná-- _______!
Bouli-Punk: Aaa! Tá mé _______!. Tá biseach orm. Tá biseach orm. Tá mé _______!
Bouli: Ach, fan, Bouli-Leadóg. Tá torann _______ ó do chroísa freisin.
Bouli-Leadóg: Aah, níl a Bouli!. Tá _______ ceart!.
Bouli-Eitleán: Agus tá mise folláin _______! Slán!

Appendix 3

Speakeasy Video

A. Céard a tharla?
Cuir uimhir in aice leis na rudaí seo san ord a dtarlaíonn siad.

____ a. Déanann sé sraofartach.
____ b. Imíonn sí.
____ c. Tosaíonn sí ag ithe.
____ d. Beireann sé ar a lámha sise.
____ e. Buaileann sé a lámh ar an mbord.
____ f. Deireann daoine eile leo fanacht ciúin.
____ g. Buaileann sí a méara ar an mbord.
____ h. Leagann sí a huillinn ar a chuid leabhar/páipéar.

B. Cuir na himeachtaí a bhí sa mhím le chéile leis an gcaint fheiliúnach.

1. Cuireann *an fear* ceist ar an mbean.
2. Déanann *sé* clamhsán léi mar gheall ar go bhfuil a huillinn ar a chuid leabhar.
3. Deir *sé* léi gan a méara a bhualadh ar an mbord.
4. Deireann *sé* rud léi nuair a thosaíonn sí ag ithe.

____ Ná déan é sin!
____ Ar mhiste leat t'uillinn a bhaint ó mo chuid leabhar?
____ Níl cead ithe anseo.
____ Ní ceart dhuit ithe anseo.
____ Stop de bheith ag déanamh an torainn sin.
____ An bhfuil an suíochán sin saor?
____ Tá t'uillinn sa mbealach orm.
____ Nach bhfanfá ar do thaobh féin?

Caoi eile:

1. An bhféadfainn ____________________
2. An bhféadfá ____________________
3. ____________________
4. ____________________
5. ____________________

Footnotes

[*] A version of this paper was presented at the meeting of the North American Association for Celtic Language Teachers in Glendale, California, on March 25, 1995. I am grateful to participants for their feedback, as well as to the anonymous referees for *Teanga*.

[1] In the context of North American higher education, the term Less Commonly Taught Languages (LCTLs) refers to all languages *except* English, French, German, and Spanish. Some LCTLs are, of course taught more frequently than others, but all are represented significantly less than the four named above at all educational levels in most parts of the U.S.

[2] See Ihde (1994a,1994b) for a survey of several Irish texts commonly used in the U.S., and some of their limitations.

[3] Some recently published materials, such as RTE's *Cogar*, are somewhat better in this respect (see Ihde 1994a:91-92,1994b:101-102 for discussion of two of these), although they still do not directly serve all the needs of the North American audience, and visual support material is crucially lacking.

[4] For example, use of the University of Minnesota's Language Center (LC), a media resource center for language teachers, has grown from a few hundred classroom hours in 1978 to 12,000-14,000 hours per year during the period 1991-1994. Most use of the LC is devoted to video viewing or production by language classes.

[5] Adapted in part from Stempleski and Tomalin (1990), Thompson (1991).

[6] This series was taken from a two hour tape that included several speakers sending greetings to a friend in the U.S. Greetings and other varieties of formulaic expression could, of course, be found in any number of contexts, including (within the limitations of copyright) feature films, TV programmes, etc.

[7] A language laboratory is not essential to the exercise; all that is needed is a video player and monitor. However, students have found the enhanced audio quality provided by use of headsets in a laboratory setting to be very helpful in their listening practice, especially in the early stages of learning. The laboratory setting also helps some students to focus their attention more closely on the listening task and filter out distractions in the classroom environment.

[8] For information, contact Bob Quinn, Cinegael, An Cheathrú Rua, Conamara, Co. na Gaillimhe, Éire.

Bibliography

Felder, R. M. & Henriques, E. R. (1995). Learning and teaching styles in foreign and second language eduation. *Foreign Language Annals,* 28(1), (spring), 21-31.

Hennessey, J. M. (1995). Using foreign films to develop proficiency and to motivate the foreign language student. *Foreign Language Annals,* 28, (spring), 116-120.

Ihde, T. W. (1994a). The communicative approach: theory, materials, and assessment. In T. W. Ihde (Ed.), *The Irish Language in the United States: A Historical, Sociolinguistic, and Applied Linguistic Survey,* pp. 94-114. Westport, CT: Bergin and Garvey.

_______ (1994b). Irish language acquisition: teaching materials and approaches. In T. W. Ihde (Ed.), *The Irish Language in the United States: A Historical, Sociolinguistic, and Applied Linguistic Survey,* pp. 86-93. Westport, CT: Bergin and Garvey.

Johnson, D. (1991). Film as a teaching medium. *IALL Journal of Language Learning Technologies,* 24(1), (Winter), 7-14.

Silverson, S., Landa, M. & Smith, J. (1983). *Speakeasy.* New York: Longmans.

Stempleski, S. & Tomalin, B. (1990). *Video in Action.* London: Prentice Hall.

Thompson, M. A. & Berman, E. C. (1991). Using Video in the Classroom and the Lab. Workshop presented at International Association of Learning Laboratories meeting, Los Angeles, CA, June 26-29, 1991.

Ag Cothu an Datheangachais

Promoting Bilingualism in Ireland

Conas atá an Scéal? *The story so far*

Ó 1978 tá Bord na Gaeilge ag saothrú chun polasaí an dátheangachais a chur chun cinn in Éirinn. Ní beag an méid atá bainte amach i rith an ama sin. Tá fás leanúnach ar an éileamh ar scolaíocht trí Ghaeilge agus tá líon mór daoine ag freastal ar ranganna Gaeilge. Ta céimeanna cinnte á nglacadh ag an státchóras le seirbhísí a chur ar fáil go dátheangach. Tá an-suim ag an earnáil phríobháideach an Ghaeilge a úsáid i bhfógraí, ar chomharthaí srl. Tá borradh agus beocht i measc phobal na Gaeilge, rud is léir ón bhfreastal ar imeachtaí agus an ceannach a bhíonn ar ábhar léitheoireachta.

Since 1978 Bord na Gaeilge has been working to promote the policy of bilingualism in Ireland. Quite a lot has been achieved in that time. The state sector is taking definite steps to provide services bilingually. The private sector is showing great interest in the use of Irish in advertising, on signs, etc. The demand for education through the medium of Irish has grown continuously and a great number of people attend Irish classes. There is a new vibrancy among the Irish-speaking community which is evident in attendance at events and in the sales of books and magazines in Irish.

Conas a thacaíonn Bord na Gaeilge leis na beartais seo? *How does Bord na Gaeilge support these developments?*

- Tugaimid comhairle don réimse gnó faoi úsáid na Gaeilge
- Bímid ag comhoibriú leis an státchóras maidir le polasaithe dátheangacha
- Tá seirbhís aistriúcháin á soláthar ag an mBord
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How Snowmen Move: Some Aspects of Lexical Choice in Irish Sign Language[1]

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Introduction

In this article I want to discuss a category of verbs in Irish Sign Language which are used to denote the motion or the location of objects. But before moving on to verbs of motion and location in Irish Sign Language I would like to refer briefly to verbs of motion and location in other languages and in particular to the analysis proposed by Talmy (1985).

Firstly, therefore, I will briefly describe the kind of analysis used by Talmy and I will show where verbs of motion and location in Irish Sign Language might fit into that framework. Secondly, I will discuss how an analysis of the kind proposed by Talmy can help us to account for the lexical choices made by signers in Irish Sign Language when they refer to the motion and location of objects. I will suggest that the choices which signers make are linked to different roles which signers can adopt. In telling a story for example, signers often switch between the role of observer and the role of participant. The choice of role is closely associated with those aspects of motion or location which signers wish to emphasise. Finally, I will briefly discuss restrictions on morphological combinations imposed by certain verbs of motion and location.

Lexicalisation patterns in languages

Talmy refers to both movement and location as a motion event. Sentences (1) and (2) both refer to motion events.

(1) The snowball rolled down the hill

(2) The snowman stood in the garden

A motion event contains several different kinds of information or elements. According to Talmy a typical motion event consists of the following elements:-

the movement or the location of an object:	Motion (move/be L)
an object that moves or is located:	Figure
a background against which the object moves or is located:	Ground
a path where the object moves or a site where it is located:	Path
an external feature:	Manner / Cause

We can identify these elements in sentences (3) and (4).

(3)	The boy	lay	on	the bed
	Figure	Motion+Manner	Path	Ground
(4)	The snow	blew	into	the hall
	Figure	Motion+Cause	Path	Ground

We can see that different elements are found in different parts of these sentences but as I have said, we are concerned with the verbs. We notice that in English, information about Motion and Manner/Cause is packaged in the verbs. Talmy finds that this is a consistent pattern for the expression of Motion in English whereby English verbs typically conflate (to use Talmy's term) Motion and Manner/Cause. This lexicalisation pattern is evident in examples (5) - (10) and is illustrated in Figure 1.

(5) The lamp *leaned* against the wall (be L + Manner)

(6) The rock *bounced* down the hill (move + Manner)

(7) Keane *kicked* the ball across the field (move + Cause)

(8) I *twisted* the cork out of the bottle (move + Manner)

(9) I *stumbled* down the stairs (move + Manner)

(10) I *hammered* the nail into the board with a mallet (move + Cause)

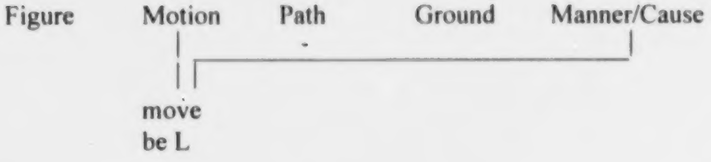


Figure 1 (Figure 2.1 in Talmy, op. cit., 62)

Other languages have a different lexicalisation pattern. In expressing Motion, verbs in Spanish conflate Motion and Path rather than Motion and Manner/Cause. This pattern is clear in examples (11) - (16) and is illustrated in Figure 2.

(11) entrar: move-in
(12) salir: move-out
(13) pasar: move-past/through
(14) subir: move-up
(15) bajar: move-down
(16) volvir: move-back
(Adapted from Talmy, 69-70)

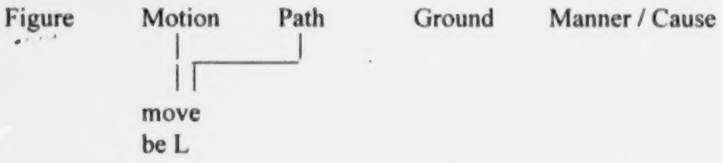


Figure 2 (Figure 2.2 in Talmy, 69)

A third lexicalisation pattern is found in Atsugewi, a language of northern California. In this language Motion is conflated with Figure as shown in the verb roots (17) - (22)

(17) -t'- small flat entity (e.g. stamp, cloth patch, button) move/be-located
(18) -lup- small shiny spherical entity (e.g. eyeball, hailstone, round sweet) move/be-located
(19) -caq- slimy lump-like entity (e.g. toad, cowpat) move/be-located
(20) -swal- limp linear entity (e.g. a hanging dead rabbit, a shirt on a clothesline) move/be-located
(21) -qput- loose dry dirt move/be-located
(22) -staq- runny icky entity (e.g. mud, rotten tomatoes, guts, manure) move/be-located
(Adapted from Talmy, 73)

In Atsugewi, these verb roots combine with other grammatical features to express events of motion or location. Talmy (p. 74) gives the following example:

'- w- - a 3rd person subject
uh- as a result of an object's own weight

-staq-	runny icky entity
-ik·	on the ground

The sequence /'-w-uh-staq-ik·- ^{a}/ is realised as [wostaqik·a] (23).

(23) Literally: Runny icky material is located on the ground from its own weight acting on it
'Guts are lying on the ground'

The typical lexicalisation pattern in Atsugewi is illustrated in Figure 3.

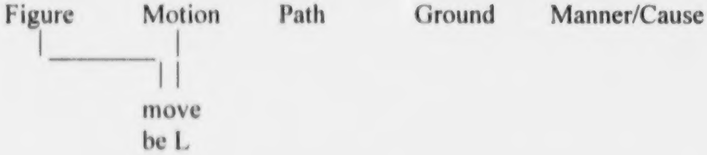


Figure 3 (Figure 2.3 in Talmy, 73)

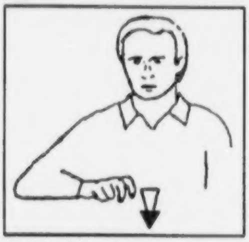
Talmy claims that these are three basic lexicalisation patterns for Motion verbs and that all languages accommodate to one or other of these patterns. In the next section we will examine the lexicalisation patterns of verbs of motion and location in Irish Sign Language and show where they might fit in Talmy's framework.

Lexicalisation patterns in Irish Sign Language

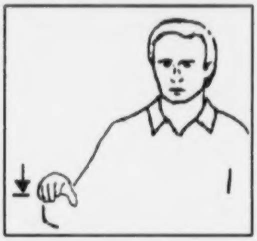
Sentence (24) contains a typical example of a verb of motion in Irish Sign Language; (25) contains an example of a verb of location. According to Talmy's analysis both (24) and (25) denote a motion event.

(24) V-CL + (c+PATH+f) OUT^FOR
(The boy) went outside

(25) COUNTRY HOUSE FAR 3D-ENTITY-CL + (BE-LOCATED+fr)
The house was situated in the middle of the countryside



V-CL + (c+PATH+f)



3D-ENTITY-CL + (BE-LOCATED+fr)

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Researchers in other sign languages have identified verb forms similar to those in examples (24) and (25). There is general agreement among researchers that verb forms of this kind have two main components - a hand configuration component and a movement component. Hand configuration refers to the shape and orientation of the hand(s); movement refers to the movement or location of the hand(s) in signing space. In examples (24) and (25) the movement component is placed in brackets to show the features that co-occur with a particular hand configuration.

Let us look at example (24) in more detail. V-CL is the hand configuration component. V refers to the V handshape which in Irish Sign Language denotes entities that are animate and saliently two-legged; CL indicates this classifying function. In (25) the handshape denotes a three-dimensional entity.

The movement component in example (24) consists of three features - a locus 'c', a movement, glossed as PATH, and a second locus, 'f'. The direction of the PATH movement is determined by the relative positions of the two loci. While PATH is executed by the dominant hand moving through signing space from 'c' to 'f', BE-LOCATED in (25) is executed by moving the hand to the locus 'fr', the movement being characterised by an abrupt end or 'stamping' feature.

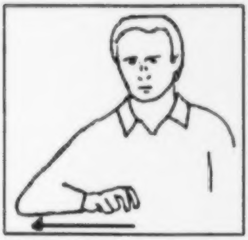
A locus is a characteristic grammatical feature of sign languages and at this point it would be useful to give a very brief definition; more detailed discussion can be found in Liddell (1990) and Engberg-Pedersen (1993). Firstly, a locus may be a point, an area or a particular direction in signing space. Usually, points or areas in signing space refer to the idea of location; directions are frequently, but not always, associated with the idea of motion. Secondly, a locus is identified as being in contrast with other loci. The locus we have identified as 'c' represents the sender locus and signifies a location in contact with or close to the signer. Other loci may be described as forward (f), forward right (fr), forward left (fl), sideward right (sr) and sideward left (sl). These are loci on a horizontal plane. There are also loci on a vertical plane. The locus 'hi' represents a significantly high location in signing space relative to a neutral location (i.e. at chest level); 'lo' represents a relatively low location.

An important issue to be considered here is the identification of the verb root in verbs of motion and location. Do we look for the verb root in the hand configuration component or in the movement component? There has been considerable disagreement among researchers on this point. McDonald (1983) and Engberg-Pedersen (1993), for example, argue that the verb root is to be found in the hand configuration component; Supalla (1978, 1986) concludes that the movement component incorporates the verb root.

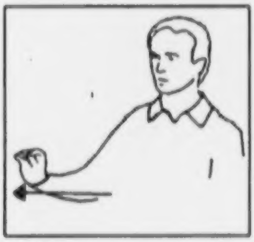
Although we might expect to find the verb root in the movement element the argument that the verb root is incorporated in the movement component creates a major problem. The same type of movement can signify different meanings. A linear movement, for example, can denote an entity's own motion (26), the motion caused by an agent (27), the distribution of an entity (28), or the extent of an entity (29). The particular meaning that is expressed depends on the specific hand configuration with which the movement is combined. For the purpose of illustration in the examples below, the linear movement is glossed as '-line'. The gloss in example (29) is given on two lines to signify the action of the two hands as articulators, the top line representing the primary articulator.

(26) V-CL + ('motion'-line+sr)
(A person) moved away

(27) HANDLE-SMALL-ENTITY-CL + ('motion caused by agent'-line+sr)
(Someone) moved a bead along



(26)



(27)

(28) TWO-DIMENSIONAL-ENTITY-CL + ('distribution'-line+sr)
(The books) were on the shelf

(29) BROAD-FLAT-ENTITY-CL + ('extent'-line+sr)
VERTICAL-2D-ENTITY-CL + (hold -----------)
The shelf was at right angles to the wall ...

Examples (26) - (29) suggest that the hand configuration has a controlling influence on the meaning of the verb and that the movement component derives its meaning from the particular hand configuration with which it combines. Thus, the hand configuration component should be seen as incorporating the verb root. In terms of this analysis, hand configurations therefore incorporate classificatory and predicative features and configurations such as V-CL and 3D-ENTITY-CL are best described as verb stems (Engberg-Pedersen, 1993).

The following are typical examples of stems in Irish Sign Language which incorporate both classificatory and predicative meaning:

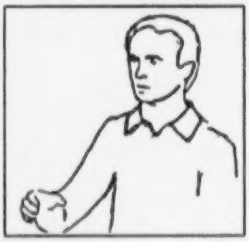
Index-CL:	Vertical one dimensional animate entity (e.g. a person)
V-CL:	Saliently two-legged animate entity (e.g. a person)
Multiple-animate-entity-CL:	e.g. a group of people - move/be located
Cylindrical-entity-CL:	e.g. a tumbler - move/be located
Long-thin-vertical-entity-CL:	e.g. a pole - move/be located
Flat-surface-entity-CL:	e.g. a board - move/be located
Three dimensional entity-CL:	e.g. a rock - move/be located
Vertical-two-dimensional-entity-CL:	e.g. a book - move/be located

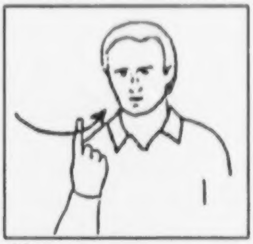
I want now to consider further expressions of motion and location in Irish Sign Language. The following examples (30) - (35) are taken from data which has been gathered as part of an on-going research project:

(30) CYLINDRICAL-ENTITY-CL + (BE-LOCATED+fr)
There was a tumbler there / in that location

(31) V-CL + (C+PATH+hi/f)
(The boy) went upstairs

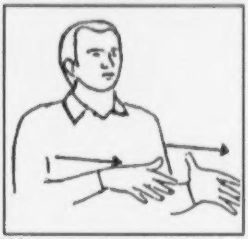
(32) (D : name sign) INDEX-CL + (fr+PATH-arc+c)
D---- came in/came here

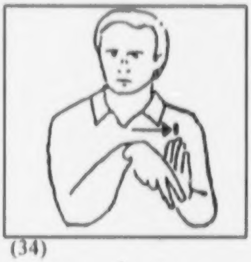

(30)


(32)

(33) MULTIPLE-ENTITY-CL + (fr+PATH+fl)
(We all) went in there

(34) V-CL + (BE-LOCATED + at left hand)
VERTICAL-2D-ENTITY-CL + (EXIST)
A person stood by the wall


(33)


(34)

We can now consider where these verbs of motion and location fit into Talmy's framework. We have already proposed that the verb root is incorporated in the hand configuration feature and that predication is only realised when hand configuration combines with movement features which provide information about Path and/or Ground. The lexicalisation pattern in Irish Sign Language is therefore similar to the pattern in Atsugewi. In the expression of Motion in Irish Sign Language the verb roots conflate Figure with Motion, as shown in examples (35) and (36) and in Figure 4:

(35)	CYLINDRICAL-ENTITY-CL	+ BE-LOCATED	+ fr
	Figure+Motion	Path	Ground
	There was a tumbler there / in that location		

(36)	V-CL +	PATH +	c	+ hi / f	
	Figure+Motion	Path	Ground		
	(The boy) went upstairs				

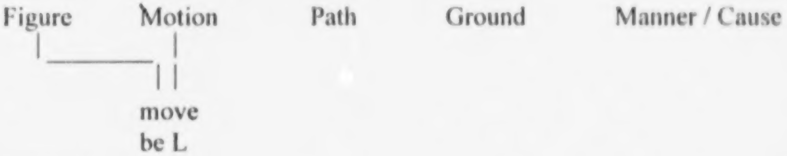


Figure 4

Implications for lexical choice among ISL users

A pattern which conflates Figure and Motion has interesting effects on lexical choice among Irish Sign Language users. But before moving on to consider lexical choice I should say something about the source of the next series of examples. Fluent ISL signers agreed to narrate Raymond Briggs' story, 'The Snowman'. In such a narrative the snowman is an interesting entity since in some contexts it is just a heap of snow with a roughly human-like shape while in other contexts it acquires characteristics which enable it to behave and act like a real person. In some circumstances therefore, the snowman might be perceived as an inanimate entity and in other circumstances as an animate entity. This possibility had a significant effect on the lexical choices which signers made and which are illustrated in examples (37) and (38).

In (37) the narrator first describes how the snowman stepped forward. In this context the snowman is perceived to be an animate entity. Then, in an aside, the narrator makes the comment, 'I don't know how it did so - but it moved', referring to the snowman in its inanimate state. In the second example, (38), a different narrator uses the same patterns.

(37) WHITE^MAN FEET-CL+IMIT: move in steps / DON'T-KNOW HOW

FEET-CL+IMIT: move in steps / 3D-GENERAL-ENTITY-CL + (sl+PATH+sr)
3D-GENERAL-ENTITY-CL + (sl+PATH+sr)

The snowman stepped forward - I don't know how it did so - but it moved

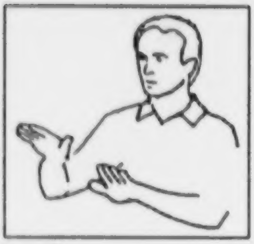
[The gloss IMIT: refers to a type of motion which is "a stylised imitation of real-world action" (Schick, 1990, 17)]

(38) BOY c+LOOK-AT+f / NOTHING FEET-CL+IMIT: move in steps /

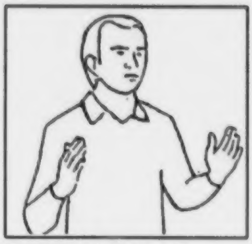
3D-GENERAL-ENTITY-CL+(sr+PATH+sl+PATH+neu) STAY
3D-GENERAL-ENTITY-CL+(sr+PATH+sl+PATH+neu)

STAND-STILL

The boy looked at (the snowman). It had not moved at all. It was still in the same position, motionless.



Feet-CL



3D-General-entity-CL

I now want to move on to a different aspect of lexical choice in Irish Sign Language. In utterances (39) - (40) the narrators describe how the snowman moved.

The signers are referring to the same general type of motion event but each has chosen to highlight a different aspect of that event. In the next example, (39), the narrator focuses on specifics of the action, that is, the manner of *locomotion* - 'stepping'.

(39) SNOW^MAN FEET-CL + (IMIT: move in steps)
The snowman stepped (forward).

In (40) the narrator refers to the action in a more general way. This predicate has a distancing effect so that the action is placed in a wider frame of reference.

(40) WHITE^MAN V-CL + (fr+PATH+c)
The snowman came forward.

In fact these two examples illustrate two broad choices that signers can make when they describe motion events. There is one predicate choice which offers a 'close-up' view of the action and there is another choice which incorporates the wider spatial environment in which the action occurs. These two choices are also linked with another important feature: restrictions on combining certain movement components with certain hand configurations. Stems such as Feet-CL can combine with movement elements which denote manner of locomotion but not with elements which denote motion paths. On the other hand stems such as V-CL can combine with movements which refer to motion paths but not with movements which refer to manner of locomotion.

Therefore, when signers wish to provide information about the manner of locomotion *and* the path of motion, a serial verb construction is necessary (see Supalla, 1990). Serial verb constructions are illustrated in examples (41) - (44).

(41) BOY RUN V-CL + (c+PATH+f)
The boy ran forward.

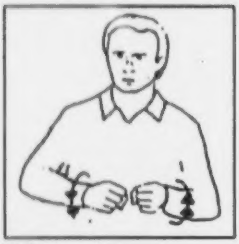
(42) RUN V-CL + (hi / c+PATH+lo / f) ...
(The boy) rushed downstairs ...

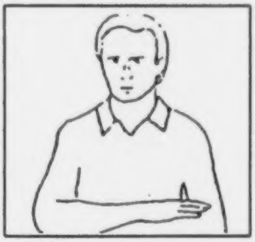
(43) RUN c+IGNORE+fl MOTHER^FATHER (-fl) ... INDEX-CL+(sr+PATH+sl)

RUN / OPEN-DOOR

(The boy) hurried out, ignoring his parents. He ran past and opened the door.

ee
(44) BOY RUN V-CL + (hi / c+PATH+neu) YARD
The boy rushed down to the yard.


RUN


WAIT

In examples (41) - (44) above, two different types of verbs are used to refer to motion. One type, as we have described already, offers a distanced view of the action and consists of a hand configuration component (V-CL and Index-CL in the above examples) and a movement component which refers to a motion path. The second type, which is glossed as RUN, expresses a close-up perspective on the action and refers to manner of locomotion.

RUN belongs to a small group of verbs in Irish Sign Language which share certain phonological and semantic properties. Other verbs of this kind which occur in the data are STAND-STILL, WAIT, and STAND-

WITH-HANDS-ON-HIPS. In semantic terms these verbs refer to motion and location; in phonological terms, the signer's body has a function that can be compared to the function of the non-dominant hand in the production of 'manual' signs such as ARRIVE, BELIEVE and STOP.

In morphological terms verbs such as RUN, WAIT and STAND-STILL differ from the verb roots we have discussed and are best analysed as plain verbs, that is verbs which do not accept agreement affixes. As such, they differ from verbs such as V-CL + (PATH+sr) which do take locative agreement. However, a verb such as RUN can be modified by non-manual features. The non-manual feature 'ee', signifying 'with effort', modifies RUN in example (44).

In terms of Talmy's analysis however, both RUN and V-CL + (PATH+sr) have the same lexicalisation pattern. Both verbs conflate Figure and Motion. In verbs such as RUN, WAIT and STAND-STILL, Figure is expressed through general body posture and through the disposition of the signer's arms and hands.

Perspectives in narrative discourse

Signers frequently use a serial verb construction to describe a motion event. This strategy enables signers to describe the event from different perspectives and in their narratives signers may switch from one perspective to another. Particular perspectives are expressed through the roles which signers can adopt. In examples (41) - (44) above, signers switch between the role of narrator and that of participant.

The narrator role creates a distancing effect, the participant role a close-up effect. Each perspective is associated with particular kinds of verbs. The choice of a verb root such as V-CL or Index-CL creates a distancing effect and permits a signer to situate the action in a particular environment. These roots can take locative affixes which are used to express spatial features such as location in space, presence or absence of movement, direction of movement an so on.

Plain verbs such as RUN or WALK do not accept locative affixes and therefore cannot be used to express location or direction of motion. However, they do allow signers to provide detailed information about the manner of locomotion. The inclusion of non-manual features permits signers to indicate that a person runs 'with ease' or 'with effort', walks 'nonchalantly' or 'determinedly'. Example (45) illustrates how manual and non-manual articulation is carefully co-ordinated. (The 'whq' gloss refers to a set of non-manual features which denote wh-questions.)

eye gaze-sl
______________ mouth pattern - ee
(48) V-CL + (hi/c+MOVE-LINE+lo/fr+rapid) / MOTHER^FATHER c+LOOK-AT+sl /

______ gaze-sl
______ whq
SIT EAT / [MEAN RUN+f] / INDEX-CL + (sl+MOVE-LINE+fr) IGNORE+sl

______ orient body-sr
INDEX-CL+(MOVE-LINE+fr) OPEN-DOOR LEGS + (MOVE-IN-STEPS)

(The boy) rushed downstairs. His parents looked at him. They were sitting and eating. 'What's all the rush about?' they said. He hurried past, ignoring them. He hurried past, opened the door and walked out ...

Conclusion

Verbs of motion and location in Irish Sign Language have a characteristic lexicalisation pattern. These verbs conflate Motion and Figure. A lexicalisation pattern of this kind influences the lexical choices which signers make in denoting the motion and location of entities. Perceived characteristics of referents govern the type of verb root that is selected. Animate and inanimate referents, for example, are signified by different types of verb roots.

Lexical choice is also influenced by the particular aspect of the motion event which signers wish to emphasise. Signers use plain verbs or stems which combine with manner of locomotion movements to describe the action in 'close-up' terms. If the action is placed in a wider spatial environment signers use verb stems which can combine with movements indicating motion paths. Frequently, signers use serial verb constructions to refer to motion events .

The particular choices made by signers are associated with the roles which they adopt in narratives. Verbs which represent a 'close-up' of the action are associated with a participant role; verbs which represent a 'long view' of the action are associated with an observer role.

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References

Engberg-Pedersen, E. (1993). *Space in Danish Sign Language: The Semantics and Morphosyntax of the Use of Space in a Visual Language*, Hamburg: Signum-Verlag.

Liddell, S. (1990). Four functions of a locus: Reexamining the structure of space in ASL, in C. Lucas (ed.) *Sign Language Research: Theoretical Issues*, Washington DC: Gallaudet University Press.

Mc Donald, B. (1983). Levels of analysis in sign language research, in J. K[illegible] and B. Woll (eds) *Language in Sign: An International Perspective on Sign Language*, London: Croom Helm.

Schick, B. (1990). Classifier predicates in American Sign Language, *International Journal of Sign Linguistics*, 1(1): 15 - 40.

Supalla, T. (1978). Morphology of verbs of motion and location in American Sign Language, in F. Caccamise (ed.) *Proceedings of the Second National Symposium on Sign Language Research and Teaching*, Silver Spring, Md.: National Association of the Deaf.

_______ (1986). The classifier system in American Sign Language, in C. Craig (ed.) *Noun Classes and Categorisation: Typological Studies in Language*, vol. 7, Amsterdam: John Benjamins.

_______ (1990). Serial verbs of motion in ASL, in S. Fischer and P. Siple (eds.) *Theoretical Issues in Sign Language Research, Volume 1: Linguistics*, Chicago: University of Chicago Press.

Talmy, L. (1985). Lexicalisation patterns: Semantic structure in lexical forms, in T. Shopen (ed.) *Language Typology and Syntactic Description*, Vol. III Grammatical Categories and the Lexicon, Cambridge: Cambridge University Press.

Extending the lexicon of Irish Sign Language (ISL)

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Abstract

This paper will discuss how the lexicon of ISL has developed and how it is being continually extended. This happens in several ways. Research to date indicates that there are 59 basic handshapes, from which all vocabulary items are created. Classifiers are used extensively in the nominal and verbal system of ISL and 15 of the 59 configurations already mentioned are employed in their use. Classifier handshapes are iconic and iconicity serves as the inspiration for the resulting lexical form. Several categories of classifiers exist: semantic, surface shape, tracing, holding, quantifying etc. Original iconic classifiers have also developed as independent vocabulary items. Many synchronic nominal forms originated as classifier verbal forms.

Other factors which have influenced the creation of ISL vocabulary include (a) compounding, (b) technology and (c) borrowing influences from English.

Compounding is a very common process in ISL. It may be done by (a) compounding two or more existing signs or (b) creating calque-type compounds. ISL takes advantage of its channel and articulator type so that the simultaneous articulation of two units also generates new vocabulary.

New technological developments, as in computers and household appliances, have initiated lexicon changes. Some changes have been traced diachronically and comparisons made with modern synchronic forms.

With the establishment of education for the deaf, the creation of fingerspelling and the development of initialised signs to aid instruction through signing, has also influenced the direction of vocabulary creation.

In conclusion the paper will outline possible future developments within the lexicon of ISL.

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1.1 Introduction

Research to-date indicates that there are 59 handshapes to be found in Irish Sign Language (ISL), illustrated below in Fig. 1. Variations to, or extensions of basic handshapes serve to create an increased number of possibilities for the formation of signs. The place of articulation or the location of signs in relation to the body and the space in front of the body, the movement path of these signs together with the orientation of the handshape are the four parameters in the construction of a sign. Stokoe (1976,1993) specified three of these parameters which he called *Tabulation* (TAB) which refers to the place of articulation, *Designator* (DEZ) which refers to the handshape and *Signation* (SIG) referring to the movement. Brennan, Colville, & Lawson (1984) followed this principal in their research when transcribing British Sign language (BSL). In more recent years it was felt by researchers like Battison (1974), Frishberg (1975) and Friedman, (1975) that the *Orientation* (ORI) of handshapes should also be included as a fundamental feature in the description of signs. In analysing ISL along these parameters, the realisation of such distinctions as TAB, DEZ, SIG, and ORI provides us with identification systems for the isolation of the particular feature that separates items of vocabulary. Liddell (1990) suggests the phonemic description of sign language using a model consisting of sets of 'movements' and 'holds'. Liddell defines 'movement' as "a segment during which some aspect of the articulation is in transition. Conversely, a hold is defined as a segment in which all aspects of the sign are in steady state." (Liddell:1990:38) Wiggling movement is included in this definition of a hold. However, for the purposes of this paper Stokoe's description provides easy access to the segments of signs which will demonstrate the system for growth or expansion of the lexicon of ISL. The examples in Figs. 2 - 9 illustrate unique realisations by the identification of one distinct significant aspect in the internal structure in the formation of signs.

Fig. 1 (a) The handshapes of ISL.

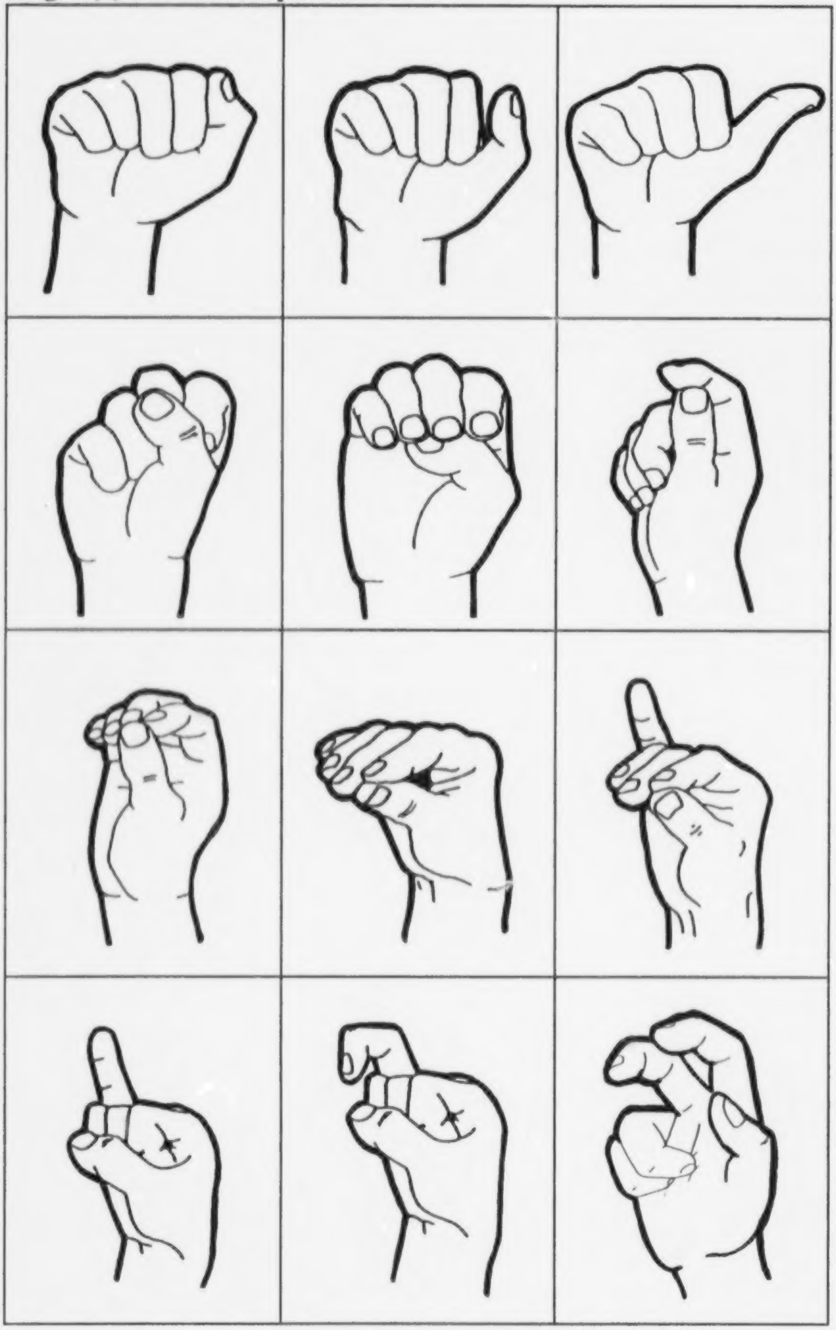


Fig. 1 (b) The handshapes of ISL

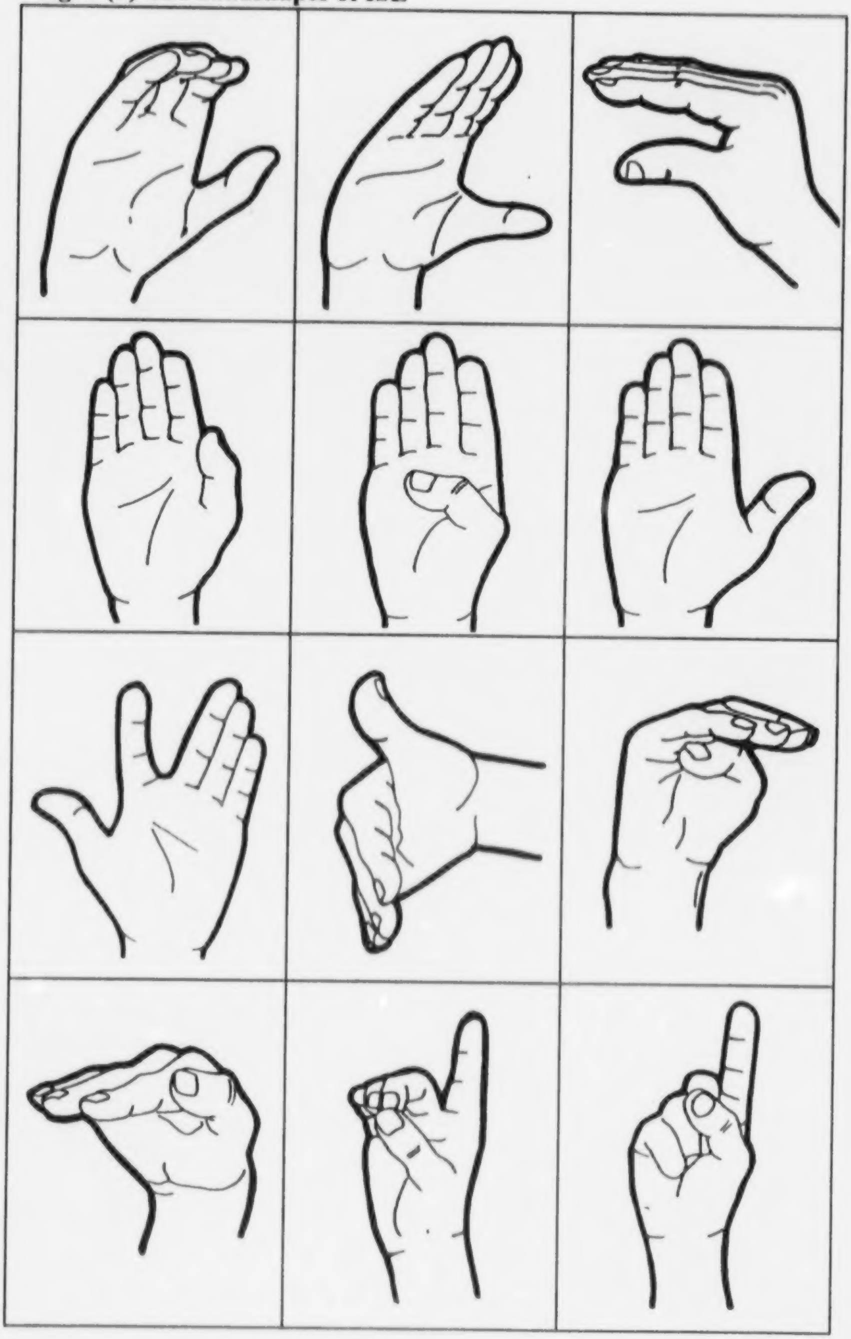


Fig. 1 (c) The handshapes of ISL

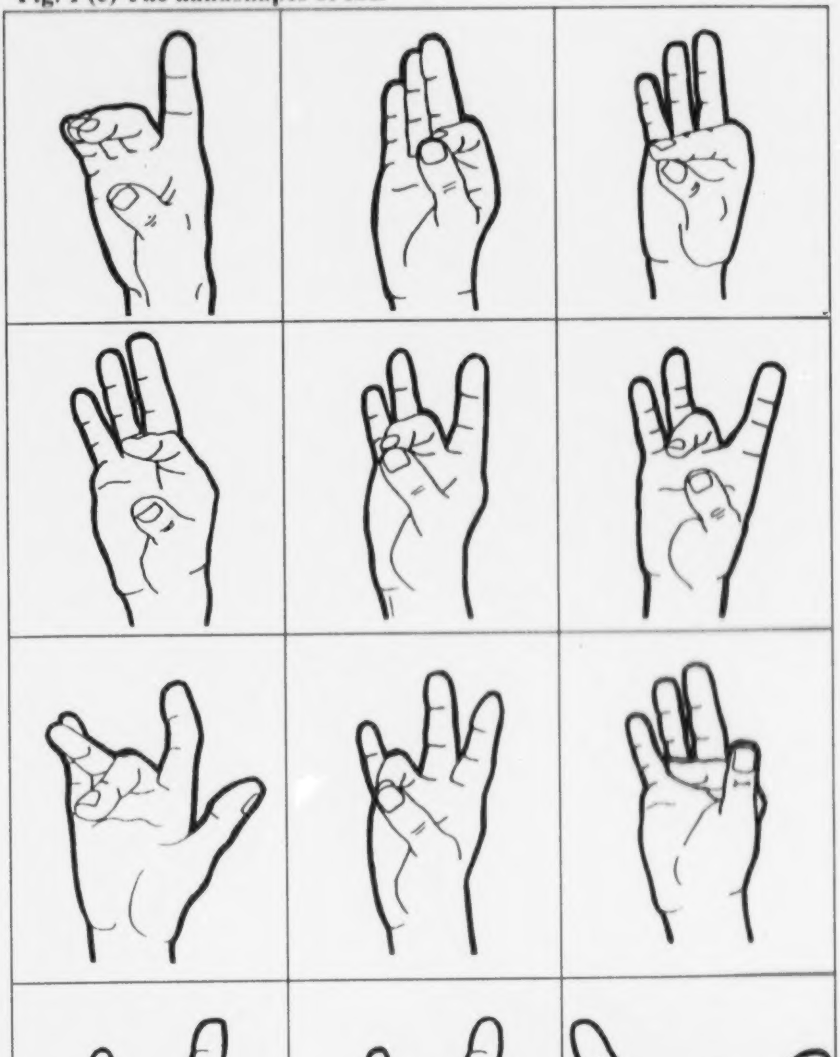


Fig. 1 (d) The handshapes of ISL

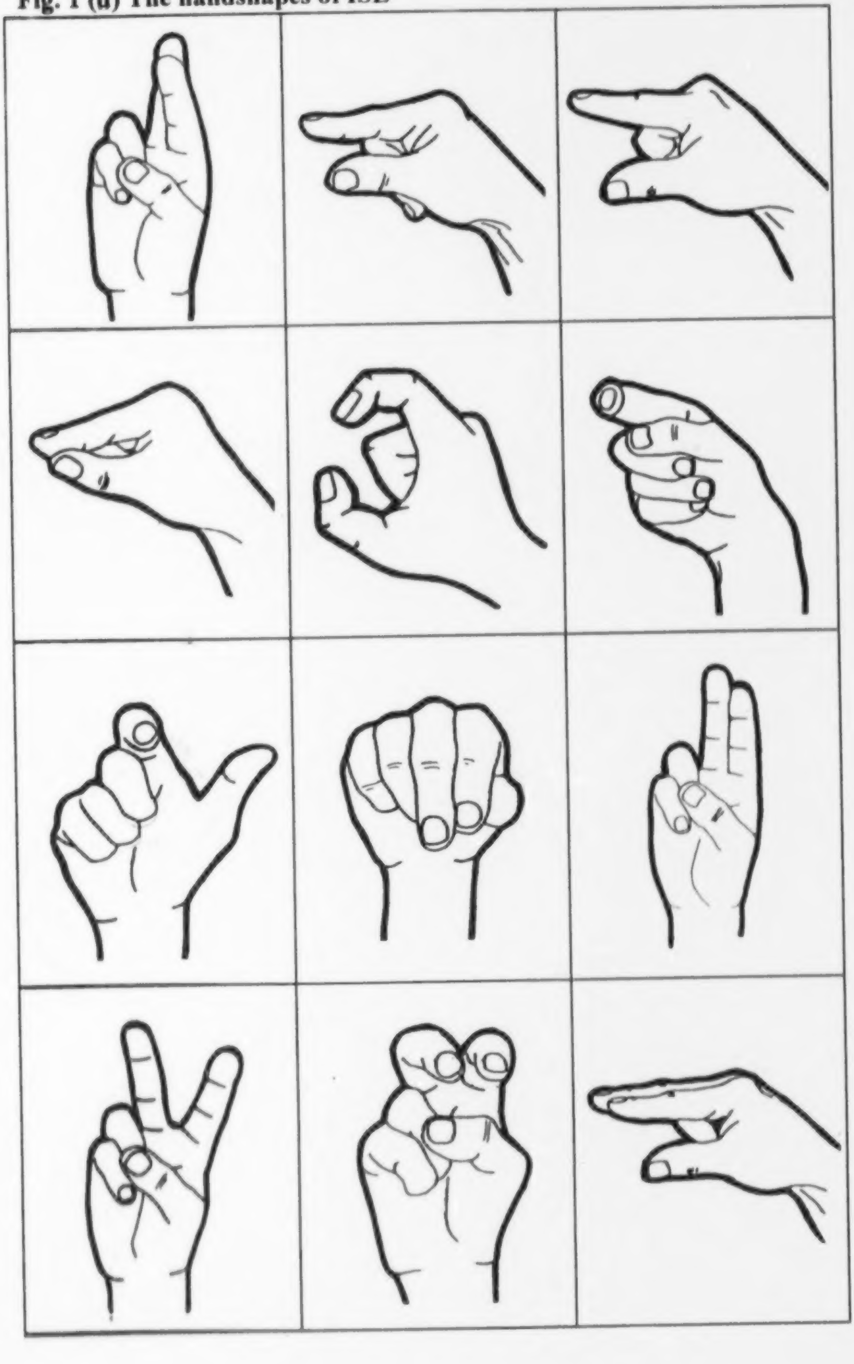
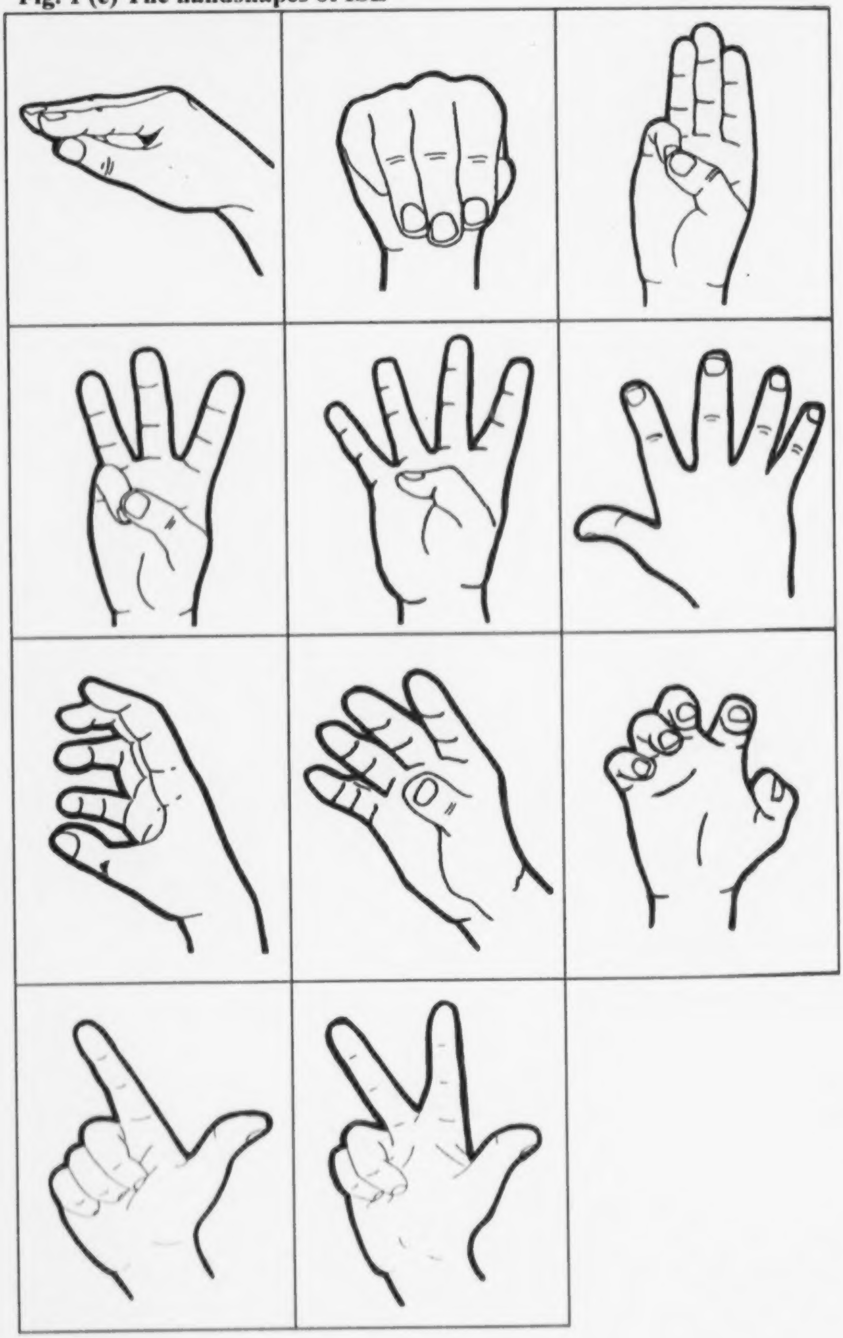


Fig. 1 (e) The handshapes of ISL



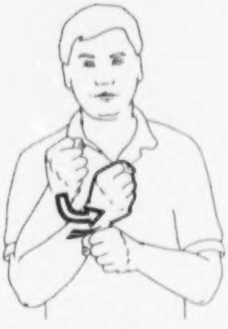


Fig. 2 MARK

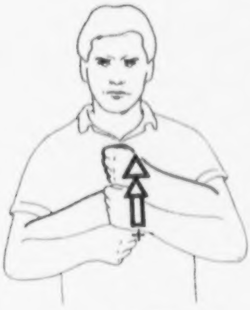


Fig. 3 SUFFER

The distinguishing feature is direction or path of movement.

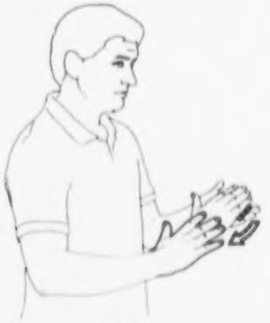


Fig. 4 LESSON

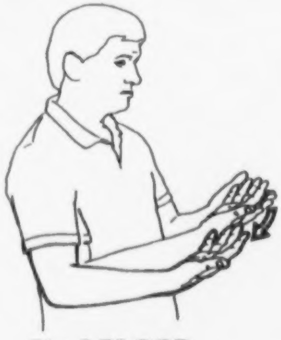


Fig. 5 BLOOD

The distinguishing feature is the orientation of the hand configuration.

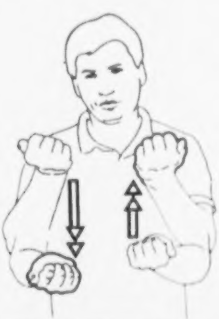


Fig. 6 SUGGEST

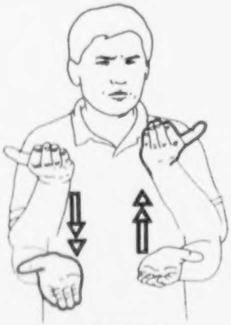


Fig. 7 HOW

The distinguishing feature is the handshape.

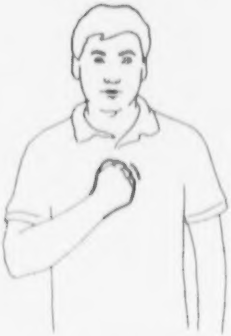


Fig. 8 MY

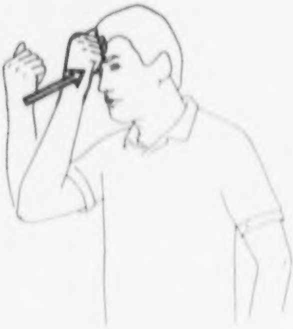


Fig. 9 STUPID

The distinguishing feature is the location of the sign.

Sign formation in ISL, may be described as containing eight types (within the parameters described above), they are as set out below:-

1. One hand only used to articulate a sign with body or near body contact.

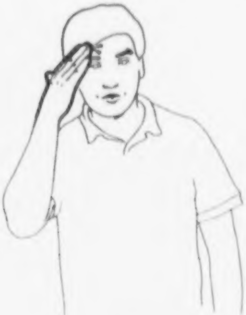


Fig. 10 KNOW

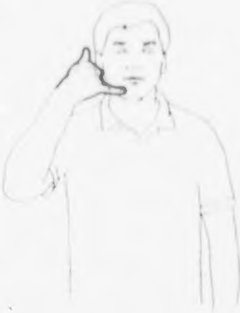


Fig. 11 TELEPHONE.

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2. One hand only used to articulate a sign in free space without any body contact.

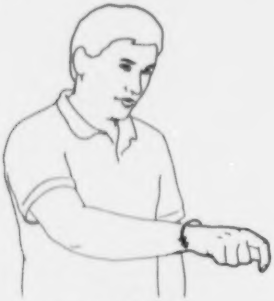

Fig. 12 KEY

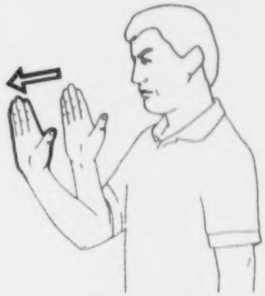

Fig. 13 MUST

3. A two-handed sign with the two hands having identical shape and touching during the articulation of the sign.

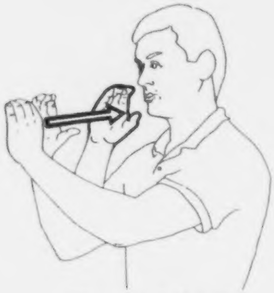

Fig. 14 COACH

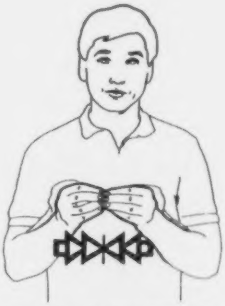

Fig. 15 MENTION

4. A two-handed sign with the hands having identical shape and moving in symmetry but without any contact taking place during the articulation of the sign.

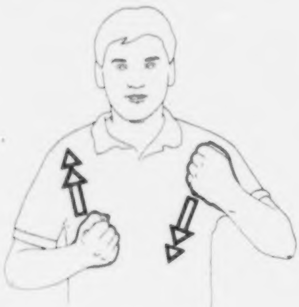

Fig. 16 CAR

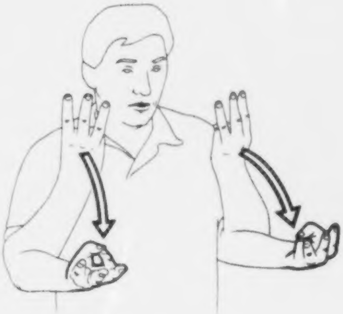

Fig. 17 WANT

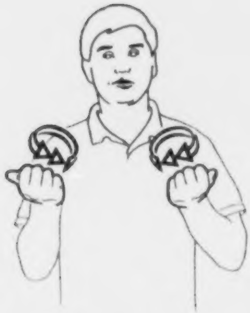

Fig. 18 SYMBOL/SIGN

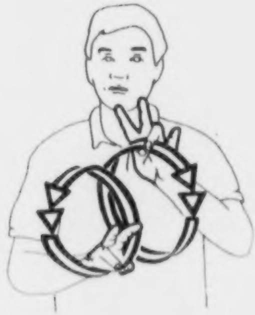

Fig. 19 TO ENQUIRE

5. A two-handed sign with identical handshapes performing a similar action and coming in contact with the body.

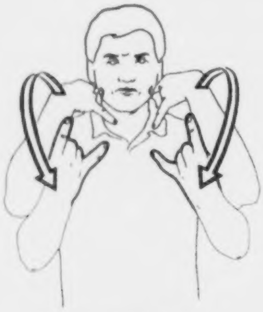

Fig. 20 SHAME

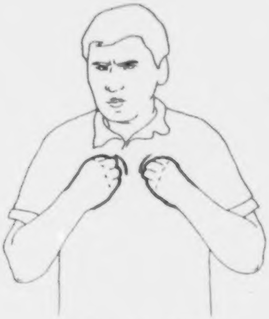

Fig. 21 OWN

6. A two-handed sign where the right or dominant hand is the active articulator and the other hand is passive.

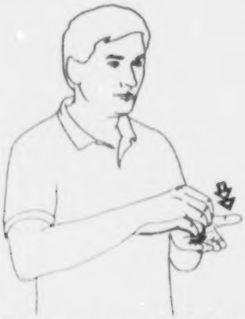

Fig. 22 TO HAVE/TO EXIST

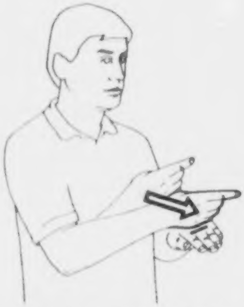

Fig. 23 THERE/TO EXIST

7. A two-handed sign having different hand configurations with each hand having equal importance (both active articulators).

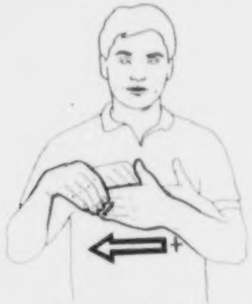

Fig. 24 LEAD

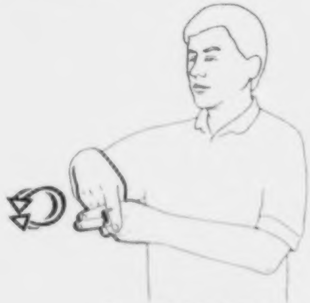

Fig. 25 HORSE

8. A two-handed sign having identical hand configurations with contact during articulation but having one dominant articulator the other being passive.

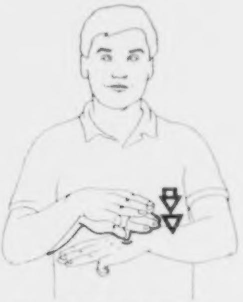

Fig. 26 MOTHER

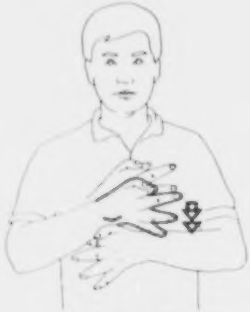

Fig. 27 FATHER

The 'signing space' referred to in the above types of sign formation is illustrated below in Fig. 28. All concepts are articulated within the

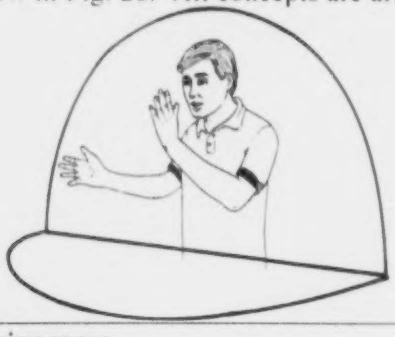

Fig. 28 The signing space

confines of the *signing frame/space*. Referent points within the signing space are established during discourse and lexical items are articulated at the given referent point during local discourse. The signing space is divided into meaningful units within an interaction. When describing the articulation of signs in terms of the location of the sign for referents the point in space may be described as to the *right* or *left* of the signer, or in *neutral space*.

At the phonological level of analysis in spoken languages, segments of sounds are traditionally distinguished using such terminology as *phonemes, allophones* etc. Due to the visual system of signed languages an alternate set of terminology, namely, *cheremes* and *allochers* was used to describe separated segments in the formation of signs in their 3 dimensional spatial framework. However, as the growth of research into signed languages around the world increased a return was made to the use of traditional terms in recognition that the distinction of segments in this way provided similar information.

To summarise what has been said in this section, we can state that at the most basic level of analysis into the internal structure of the formation of signs, and the identification of significant distinctions along the parameters of TAB, DEZ, SIG and ORI, helps us to isolate the building blocks or the foundation from which signs are built and therefore identifies the potential for expansion by alteration of a single aspect in the formation of a sign.

1.2 Classifiers

One of the most significant means of expansion within the lexicon of ISL is the use of classifiers. Of the 59 handshapes, 15 are extensively employed in the classifier system which permeates the nominal, verbal and adjectival systems within the language. A classifier as defined by Crystal (1980) refers to a set of entities sharing certain formal or semantic properties. Depending on how an object is perceived by any particular culture, different morphemes are used in order to classify that object as belonging to a particular lexical set; round object set, flat object set et cetera. There are several categories of classifiers in ISL such as semantic, surface shape, tracing, and quantifiers. Classifiers are proforms and need a full reference. The lexical item belonging to a particular morpheme set or class must be given before the classifier is articulated, thus giving the classifier form a specific meaning for the duration of the local discourse, that of its full referent. These classifier forms are also found in spatial verbs.

1.2.1 Semantic classifiers

The classifier for vehicle, as seen in Figure 29, may be classified as a 'semantic' classifier. It represents all land, and sea vehicles such as *car, lorry, motorbike, bicycle*, and various types of *boats* regardless of their size or shape. All semantic classifiers function as fully deictic forms. The orientation may change on occasion for water-based vehicles and a few isolated instances, for example, in the articulation of the lexical item *rollercoaster* the orientation will alter depending on the viewpoint of the signer in relation to the vehicle at any particular time during its movement. However this 'flat hand' handshape is understood to mean **VEHICLE.** Wallin (1990) examines polymorphemic verbs (compound forms) and suggests that parts of the hand (in the flat handshape) represent a set of morphemes. Wallin also suggests that the fingertips are representative of a set of morphemes. Specific points along the classifier handshape represent separate units of meaning. The orientation and location of this handshape draw attention to the frontal or rear view of the vehicle, thus one may demonstrate in which direction a vehicle was facing from the perspective of the signer. However, this information is not explicit in the plural form, a reduplication of the handshape.

The handshape 'index finger extended from closed fist' is the classifier for **PERSON** (Fig. 30). It represents *boy, girl, man, woman* and some animals, *monkey* for example or a two legged animate entity. This classifier is also fully deictic in its path of movement.

The handshape 'index and middle finger extended from the fist and held apart' represents **LEGS** (in Fig. 31). They may represent a human or a two legged animal. This sign may represent the activity of legs in a multitude of ways creating many lexical items such as *to stand, to be seated, to jump, to run, to hop, to be drunk*, or *to dive.*

The classifier for a **saliently 3 dimensional object** (Fig. 32) is represented by the 'bent 5 or clawed hand'. An object may be represented as 'being located at' or 'existing at' a given point in relation to the speaker/signer, or in relation to each other as they appear from the signer's perspective. *t.v., video, chair, computer, printer.*

Semantic classifiers contribute to the growth in the lexicon in that they are a morphological unit which may be understood as an independent unit at the semantic level. When given a full reference these classifiers take on specific meaning and thereafter may represent this specific meaning for the duration of the local discourse. Modulations of movement in the articulation of the handshape and/or modulations in the path of movement within the signing space give additional adverbial and aspectual information.

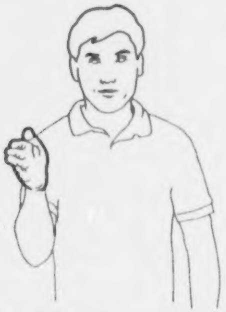

Fig. 29 B→-CL 'vehicle'

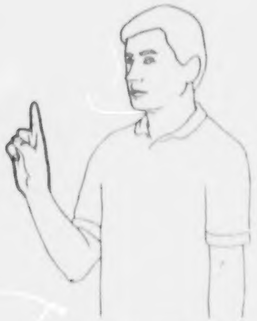

Fig. 30 1-CL 'person'

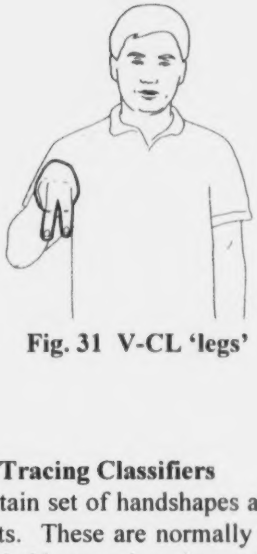

Fig. 31 V-CL 'legs'

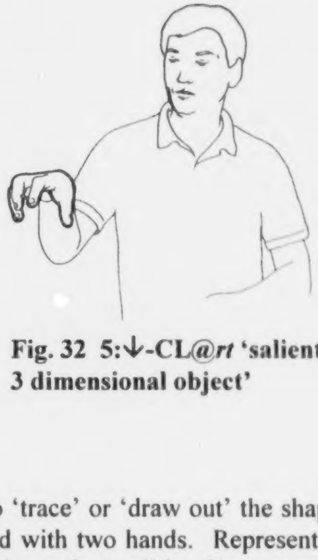

Fig. 32 5:↓-CL@*rt* 'saliently 3 dimensional object'

1.2.2 Tracing Classifiers

A certain set of handshapes are used to 'trace' or 'draw out' the shape of objects. These are normally articulated with two hands. Representation of real objects or imaginary objects or shapes is possible. Some examples which employ the handshape 'index finger extended from fist' are **SQUARE** (Fig. 33), **CIRCLE** (Fig. 34), and the shape of a **STAR** (Fig. 35). Detailed descriptions of items is possible, for example a *box* containing an 'X' through it, or a *square* containing a *circle* which is divided/marked in four sections and where the perimeter of the *square* has a *diamond* attached to the centre lower line. Iconicity of tracing classifiers allows for constant creativity of new forms resulting in the expansion of the lexicon.

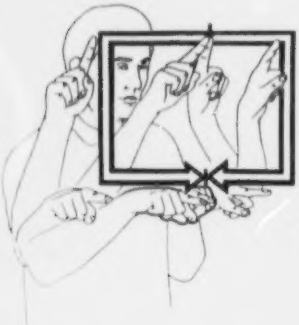

Fig. 33 (2h) 1 outline -CL 'square'

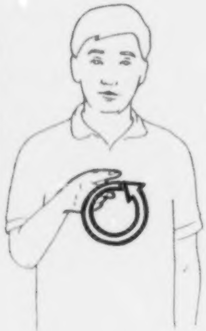

Fig. 34 1 outline -CL 'circle'

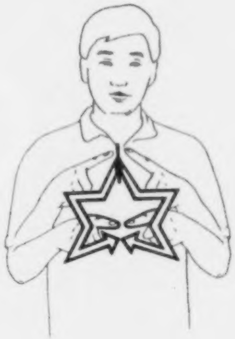

Fig. 35 (2h) 1 outline -CL 'star'

The handshape 'fingers and thumb bent to form a curve' may represent cylindrical objects of varying degrees of depth. One such example may be found in the sign **UPRIGHT CYLINDRICAL OBJECT** (Fig. 36) meaning *pipe* palms facing left and right. In another orientation, palms facing down, this configuration represents **TO CARRY A CYLINDRICAL OBJECT IN A HORIZONTAL PLANE** (Fig. 37), namely a *pipe*. This cylindrical object in other contexts and in combinations with other signs and contexts may mean *lamp post, flag post* and so on.

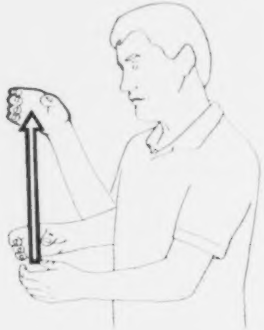

Fig. 36 (2h) C→ -CL 'upright cylindrical object'

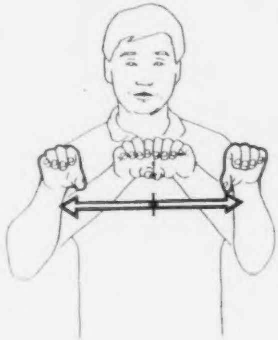

Fig.37 (2h) Ct→-CL

The handshape (Fig. 38) 'index finger and thumb touching, all other fingers extended' represents very small objects such as *sewing needle, thread, twine*, and *electric wire*.

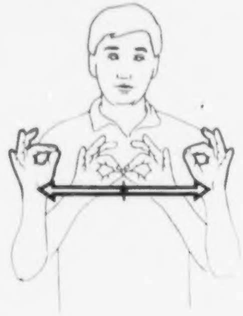

Fig. 38 (2h) G:t -CL 'twine'

1.2.3 Surface shape classifiers

Surface shape classifiers are made by the 'flat hand' handshape. The thumb being extended, held upright or bent is insignificant in terms of meaning in ISL. The classifier traces the surface shape of flat objects in any orientation. It may be articulated with one hand in examples such as **WALL** or **SCREEN** (Fig. 39). It may also be articulated with both articulators in examples such as **FLAT-SURFACE OVERHEAD** (Fig. 40) which may in context be obvious in meaning as *ceiling* or *platform on a higher plane*. When articulated as two hands moving in symmetry, palm orientation facing inward, it is then representative of the meaning **TWO-UPRIGHT-FLAT-SURFACE** (Fig. 41) *corridor*, or *hall*. When articulated with two hands, palm orientation down and the movement path of both hands moving away from each other from the centre outward in opposite direction, it is understood to mean **TABLE** (Fig. 42), and when this form is articulated again at another height it means **SHELF** (Fig. 43). The same handshape when articulation is accompanied with the non-manual features of 'pursed lips' and 'squinted eyes' then indicates a **SMOOTH-FLAT-SURFACE** (Fig. 44) such as a road or bowling alley. This handshape, when articulated in a movement outlining the contours of a hilly surface, is indicative of **UNEVEN TERRAIN** (Fig. 45).

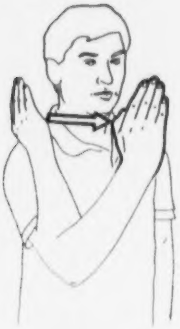

Fig. 39

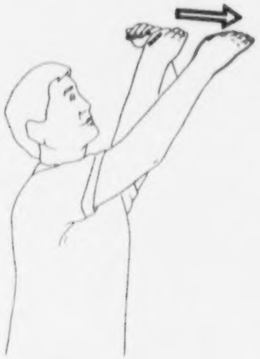

Fig. 40

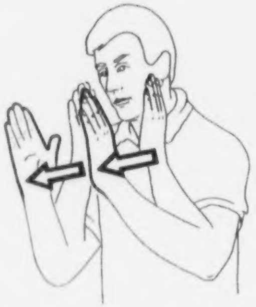

Fig. 41

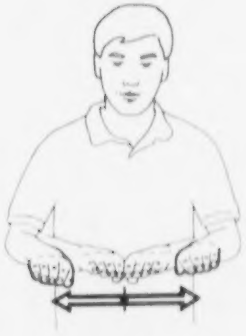

Fig. 42

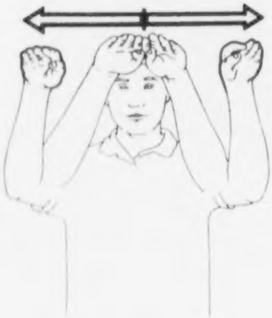

Fig. 43

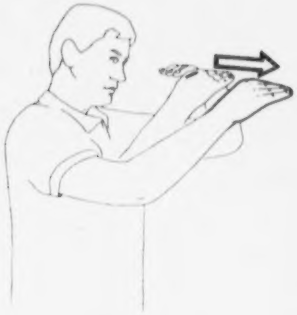

Fig. 44

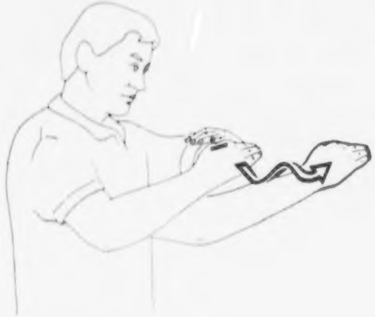

Fig. 45

1.2.4 Holding classifiers

This category of classifiers may be articulated by one or two articulators depending on the item referred to. Their creation has been inspired through attempts to mimic or reflect the real-life item and its usage by showing how the object is held. Therefore, verb forms were created initially and the noun forms developed later. The distinct feature identifying the noun/verb form may be noted by one significant aspect in the articulation, namely the length of the duration of movement in the articulation, the noun form having the shorter length of movement. Examples of holding handshapes may be seen in the signs **HAIRBRUSH** (Figs. 46 and 47), **COMB** (Fig. 48) **SWEEPING BRUSH(BROOM)** (Fig. 49). Note: the examples Figs. 46, and 47 are only two of several possible handshapes used in ISL to denote the item 'hairbrush'.

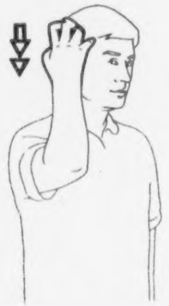

Fig. 46 5:-CL 'hairbrush' *noun*

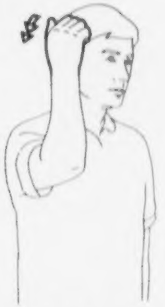

Fig. 47 A -CL 'hairbrush' *noun*

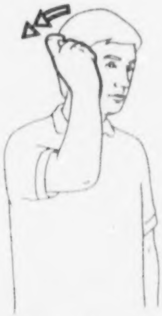

Fig. 48 T -CL 'comb' *noun*

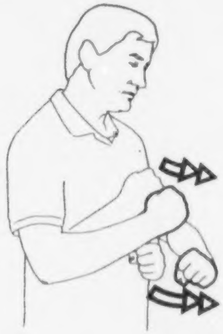

Fig. 49 (2h) S -CL 'Broom' *noun*

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1.2.5 Quantifiers

The classifier handshape for quantification in ISL is the '5' or 'all fingers extended and spread'. The fingers may be slightly bent or held in a relaxed manner. This classifier may represent many people. When articulated with one hand only, it refers to an unspecified number of people between five and nine. When articulated with two hands it refers to an unspecified number of people of ten or more. It may also represent animals. When representing the entity **LOT BIRDS** (a lot of birds) taking flight, their direction and pattern of movement is indicated by the orientation and movement of both hands during the articulation. This handshape when 'slightly bent' may indicate a crowd of people approaching.

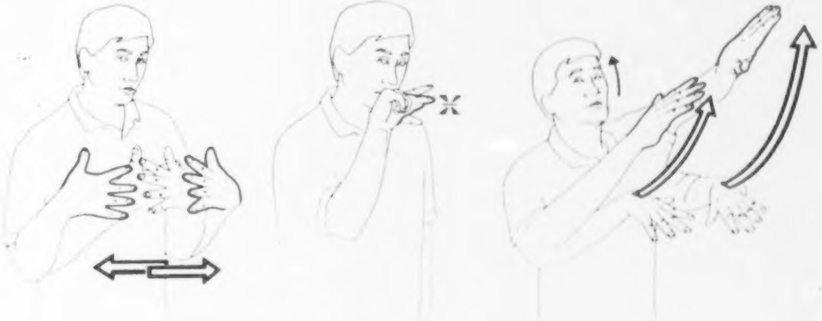

Fig. 50 **gaze lf**

LOT BIRD (2h) 5↓ -CL -*lf* 'burst up into air'

1.3 Educational influences

With the development of education for the deaf, a visual manual system was invented to represent the twenty six letters of the English alphabet. Over time this set of manual symbols have been imported into original ISL and are evident in the many lexical initialised items. The handshapes represent the English word; however, the item of vocabulary has now been incorporated into the morphological structures of ISL. Some examples are in the signs, **TRUE, REAL, CERTAIN** (Figs. 51-53). All of these vocabulary items are semantically related and have the same TAB, SIG, and ORI but the DEZ is the symbol or handshape representing 't', 'r', 'c'. Again, another set of examples may be found with the meanings **HAPPY, GLAD, DELIGHTED** (Figs. 54 - 56). All of the elements of formation are constant with the only significant difference being the DEZ which represents the initial letter from the English language.

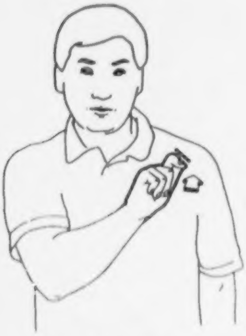

Fig. 51 TRUE

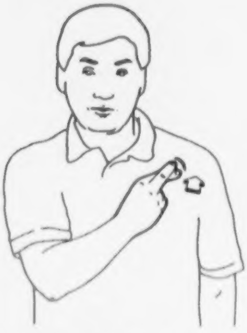

Fig. 52 REAL

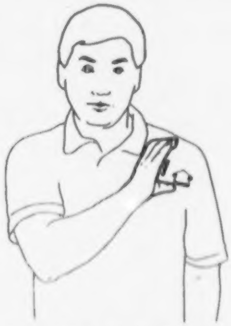

Fig.53 CERTAIN

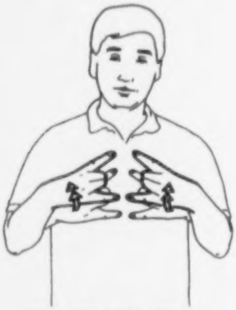

Fig. 54 HAPPY

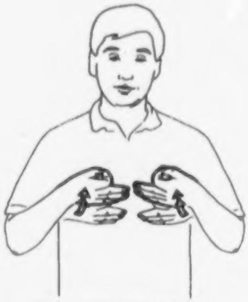

Fig. 55 GLAD

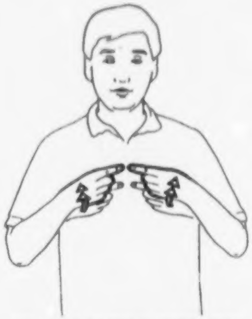

Fig.56 DELIGHTED

Some of this borrowing from English may be seen in *calque type* compound formation as in the example *hotel* whose component parts are the bound morpheme **'H'** of English + the morpheme **BED** from ISL.

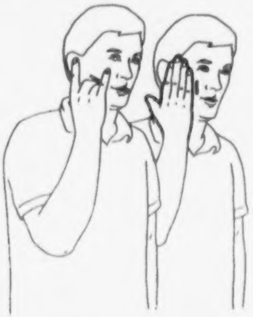

Fig. 57 Calque formation H + BED 'hotel'

1.4 Iconicity in lexical items originating in non-tracing classifiers

There is a category of lexical items whose origins are to be found in holding, touch and instrument type classifiers. Their noun and verb forms are again distinguished by the length of movement. However, through iconicity and usage, these items have acquired a fixed place of articulation and are now considered to have full lexical status. Examples may be found in the signs **CIGARETTE/SMOKING A CIGARETTE, SCISSORS/TO CUT, CAR/TO DRIVE, BOOK, BABY, BUTTERFLY.**

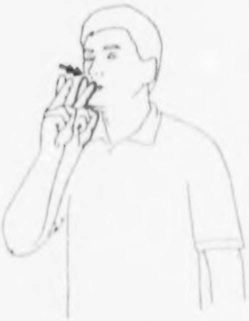

Fig. 58(a) CIGARETTE (noun)

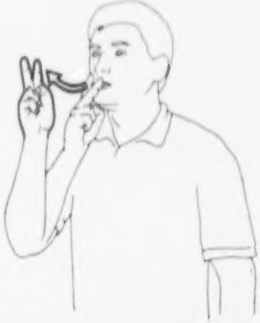

Fig.58(b) SMOKING A CIGARETTE (verb)

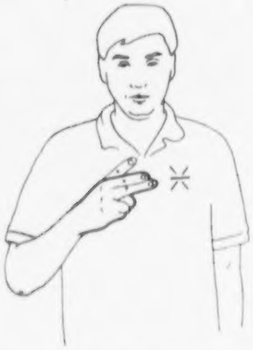

Fig. 59(a) SCISSORS (noun)

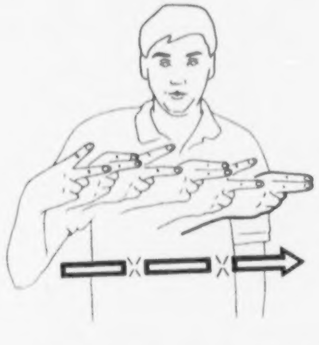

Fig. 59(b) TO-CUT-WITH-SCISSORS (verb)

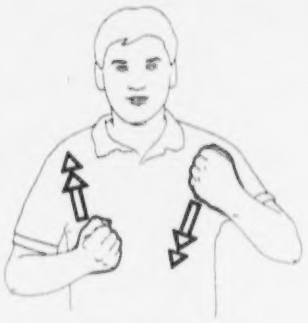

Fig. 60(a) CAR (noun)

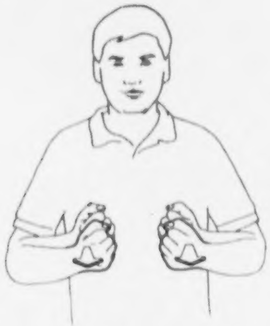

Fig. 60 (b) TO DRIVE (verb)

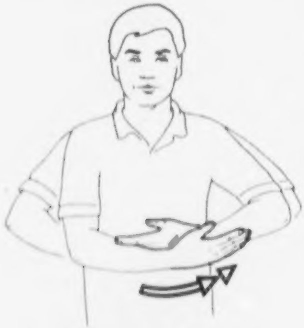

Fig. 61 BABY(noun)

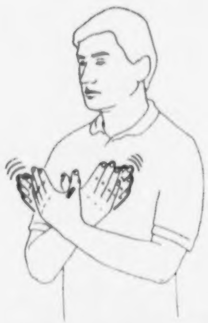

Fig. 62 BUTTERFLY (noun)

1.5 Arbitrary Signs

The lexicon of ISL has not been derived entirely from iconicity. Many of the forms for lexical items are completely arbitrary and must be learned as such. Some examples from ISL may be found in the handshape (Irish F). The place of articulation is on the non-dominant side, the sign is located on the face around the jaw line. The distinguishing feature is the pace of movement combined with various non manual features together with the head and shoulder movement. These combinations of features give rise to several explicitly different meanings such as *oops - I made a mistake* (Fig.63), *I'm surprised at that* (Fig. 64). *Take that with a grain of salt* (Scepticism) (Fig. 65) or it can also mean *I was wrong*, (Fig. 66) or be used as a response to news as *fancy that* (Figs. 66, or 64) or *I would not have expected that* (Figs. 66 or 64). Please note, these are approximate translations. There is no direct English equivalent and context provides meaning.

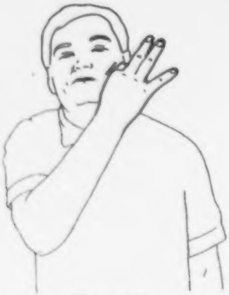

Fig. 63

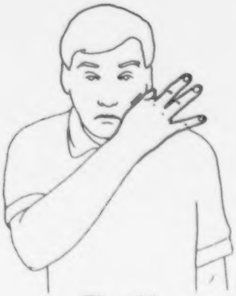

Fig. 64

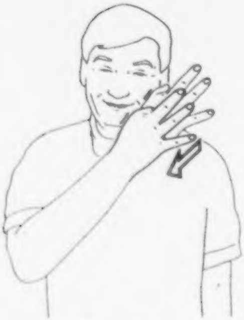

Fig. 65

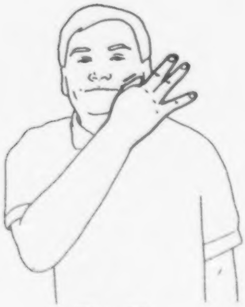

Fig. 66

Another handshape in this category of lexical items is the 'closed fist with thumb extended'. It is the morpheme used to mark *occurrence*, *event* or *achievement*. It normally precedes the verb. This may be used in many contexts and has multiple translations. It may signal the completion of an action which happened over time as in *building a house*. It may signal success as in having *made a new date* or *got a new girlfriend.* It may mark a change of state as in the repair of a broken television.

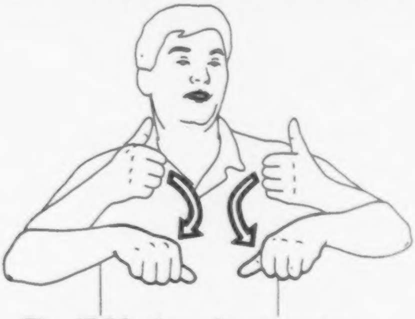

Fig. 67 Marker of occurrence.

1.6 Compounds

"Compounds in English are comprised of two types of morphemes or units of meaning, 'bound morphemes' and 'free morphemes' creating a new word or lexical item. The meaning of this new lexical item may or may not be related to that of the original parts. Free morphemes are those smallest units which contain meaning, and may be understood independently. Bound morphemes are those smallest units or forms which contain meaning but may only be fully understood when combined with another morpheme to form a single lexical item with precise meaning. Compounds are formed in a multitude of combinations of noun + noun, adjective + noun, verb + verb. *Lighthouse keeper* is a compound containing bound and free morphemes. It may be analysed as light (f.m.) house (f.m.) keep (f.m.) er (b.m.)

> *lighthouse keeper*
> *light/house / keep/er*
> *noun+noun+verb+affix (creating a noun by derivational morphology)"*

(Ó Baoill & Matthews, forthcoming)

The free morphemes **MOTHER** and **FATHER** (Fig. 68) are both articulated with a movement entailing two taps or contact of the hands. In the compound formation of *parent* each component looses some of its internal movement and the final compound is signed with only two movements entailing contact rather than the sum of the two originals. In the compound **BROWN⌒FACE** = *tan* (Fig. 69), there is some movement in the articulation of **BROWN**. The duration of articulation is reduced in the compound to one short movement and the curved hand configuration of **FACE** is softened to an open '5' hand configuration. In the compound *breakfast* being **MORNING⌒EAT** (Fig. 70) there is a reduction from two movements to one in the element **EAT**. There are two variations of the hand configuration in the first element. One configuration may be described as that of three closed fingers or 'm', the alternative commonly used configuration being the flat handshape. In the compound **BLESS⌒HOUSE** (Fig. 71) there is a significant loss of movement in the initial element, and in the sign **HOUSE** two movements are reduced to one. In the compound **BLUE⌒MARK⌒CLASSIFIER 3** (bent) (Fig. 72) meaning *bruise* the duration of the length of movement in the articulation of the first element is radically reduced. There is a continuum of movement throughout the articulation of the second element and the pace of articulation of the final element is much slower. The duration of maintaining the hand configuration of this last element is as long as the

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sum of the duration of the first two elements. The place of articulation of the last element is dependent on the 'real life' location of the bruise. These are examples of how the lexicon is created.

ISL COMPOUND SIGN	LEXICALISED MEANING OF COMPOUNDS
MOTHER⌢FATHER	Parent
BROWN⌢FACE	Tan
MORNING⌢EAT	Breakfast
GREEN⌢AREA	Field
COLOUR⌢SPREAD	Colour ran
BLESS⌢HOUSE	Church
YELLOW⌢PHONE⌢BOOK	Golden Pages (Telephone Directory)
MARK⌢INDEX FINGER ON FOREHEAD	Scar
BLUE⌢MARK⌢3:-CL (arm)	Bruise (on arm)

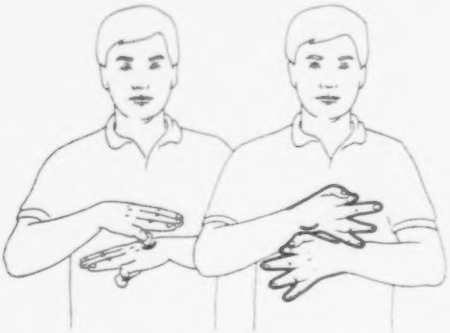

Fig. 68 PARENT

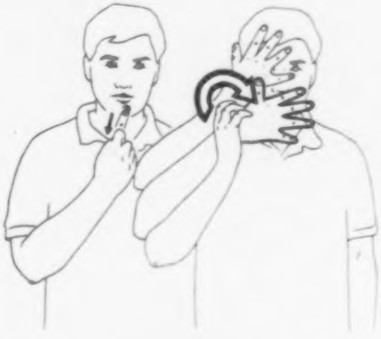

Fig. 69 TAN

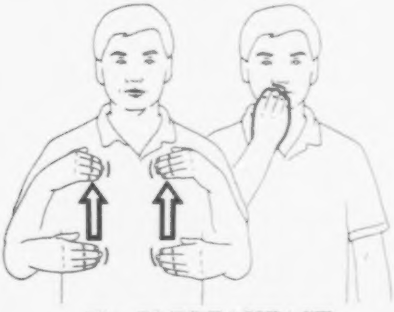

Fig. 70 BREAKFAST

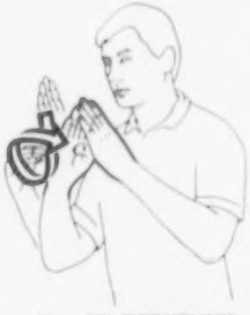

Fig. 71 CHURCH

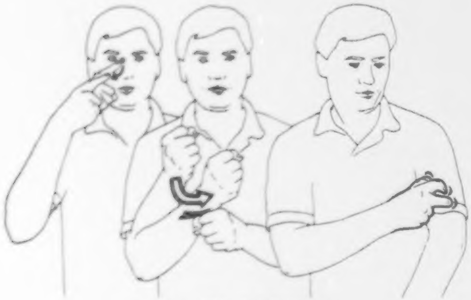

Fig. 72 BRUISE

1.7 Technology

Having looked at formational parameters let us now turn our attention to reasons for sign innovations. With changes in technology, over time, the language has changed and evolved with it to accommodate new inventions. The original sign for **LIGHT** was articulated with the handshape of index finger extended. The place of articulation was in front of the mouth and the articulation of this sign was accompanied by a small outward blow of air from pursed lips. Such a form got its inspiration from the **CANDLE** (Fig. 73). With the invention of the light bulb an addition was made in the production of the sign representing **LIGHT**. The addition was the closed fist being flicked open, representing the bulb shining (Fig. 74). With time, usage and a younger generation who had never experienced light by candlelight, the first element was lost (Fig. 75). **FLUORESCENT lighting** is indicated by two hands in the closed fist to open '5' hand configuration. They are both active articulators and their articulation is accompanied with the non-manual feature of blinking narrowed eyes (Fig. 76).

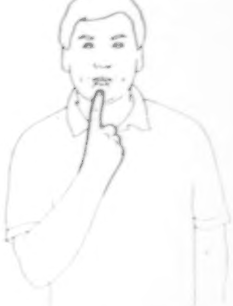

Fig. 73 CANDLE

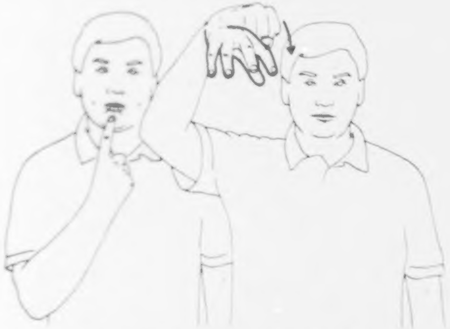

Fig. 74 CANDLE-LIGHT

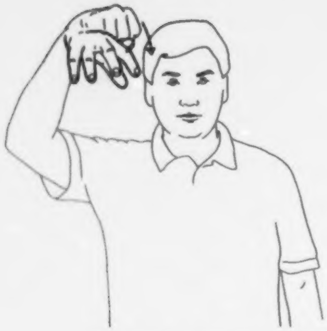

Fig.75 LIGHT-BULB

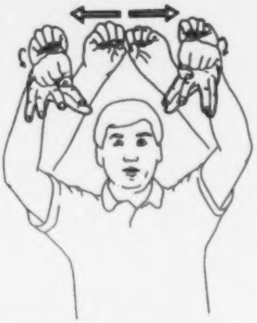

Fig. 76 FLUORESCENT-LIGHT

Variations in the formations for the lexeme LIGHT

Another example of lexical change is found in the signs used to describe washing. At one time the handshapes were two closed fists and the movement reflected the notion of one scrubbing on a scrubbing board. There was also the sign for *mangle* which was articulated as a closed fist in the action of turning the handle, with a flat hand representing the clothes going through the mangle between the rollers. The sign for today's automatic washing machine is articulated as **WASH∩INDEX CIRCULAR MOVEMENT**. The hand configuration in this compound is initially two closed fists, palms facing together. The hands make contact and are articulated in the movement of a scrubbing action. This is followed by the index finger extended on the dominant hand indicating a circular movement of the drum.

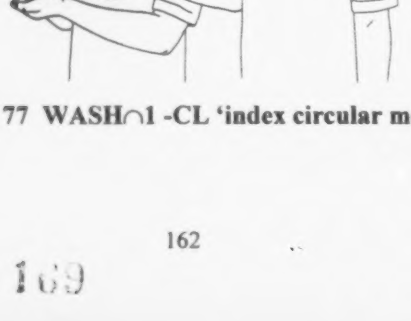

Fig. 77 WASH∩1 -CL 'index circular movement'

The telephone has undergone many changes both technically and cosmetically. The original sign reflected the old apparatus held to the mouth in one hand with the separate listening device held to the ear. A winding action was articulated at the ear with the 't' handshape (Fig. 78). The change in handshape became the 'y' handshape, that is the thumb and little finger extended, and now represents the shape of the modern day handset of the telephone (Fig. 79). There is also the curved handshape used to signify a mobile phone and there is the combination or simultaneous compound of thumb and little finger extended with the second hand articulating the keyboard to denote the **MINICOM** or text telephone (Fig. 80).

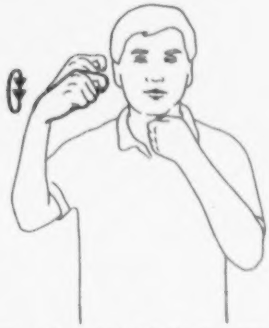

Fig. 78 (old) TELEPHONE

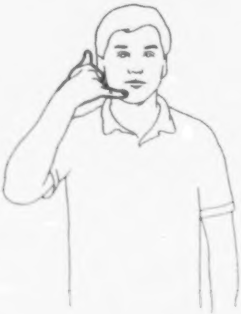

Fig. 79 TELEPHONE

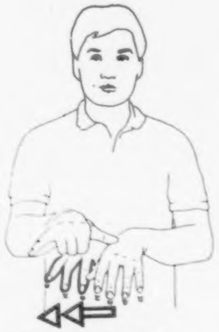

Fig. 80 TEXT TELEPHONE

The difference in the movement and rhythm in the articulation of *typing* is the distinguishing factor in supplying information about the old manual typewriters and the modern electric keyboard which features a 'wiggling' action of the fingers rather than a deliberate upward and downward action.

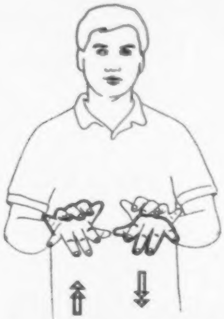

Fig. 81 (old) TYPING/TYPEWRITER

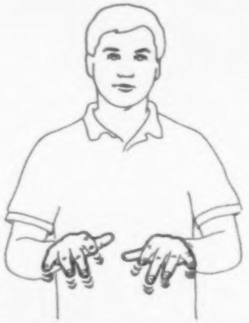

Fig.82(new) TYPING/TYPEWRITER

1.8 Conclusion

We have seen that ISL has several means within its structure which are employed in extending the number of possibilities for new creations within the lexicon. Close examination of the internal structure of signs provides us with parameters by which we may identify the significant element in sign formation i.e. handshapes, their movement paths, orientations and locations - body or free space, contact or non-contact, single or double articulators which when used in certain combinations is the distinction between lexical items. Furthermore, Irish Sign Language makes much use of iconicity in the creation of lexical items and also makes use of semantically related categories by retaining most of the characteristics of one form and making only one significant alteration in the formation of a sign to realise another form or morpheme. ISL uses compound formations based on the internal structure of the language itself and has also borrowed some external features of English creating other useful combinations. Finally, classifiers which permeate the nominal and verbal system of ISL, particularly tracing and holding classifiers, possess an infinite number of possibilities for the creation of new lexical items.

References

Baker-Skenk, C. and Cokley, D. (1980). *American Sign Language*, a teacher's resource text on grammar and culture, Washington DC: Gallaudet University Press.

Battison, R. M. (1974). *Phonological Deletion in American Sign Language*, Sign language studies 5, 1-19.

Brennan, M., Colville, M. D., and Lawson, L. K. (1984). *Words in hand*, Edinburg: Moray House College of Edinburgh.

Crystal, D. (1980). *A First Dictionary of Linguistics and Phonetics*: London: André Deutsh Limited.

Friedman, L. A. (1975). *Phonological Processes in American Sign Language*, Proceedings of the first annual meeting of the Berkeley Linguistics Society, 47-157.

Frishberg, N. (1975). *Arbitrariness and Iconicity: Historical change in American Sign Language*. Language, 51, 696-719.

Liddell, S., K. (1990). Structures for representing handshape and local movement at the Phonemic level. In S. D. Fischer and P. Siple (eds) *Theoretical Issues in Sign Language Research*, Volume 1, 37-65. The University of Chicago Press.

Ó Baoill, D. and Matthews, P. A. *The Structure of Irish Sign Language*. ITÉ Institiúid Teangeolaíochta Éireann (Forthcoming).

Stokoe, W. C. (1993). Revised Edition, *Sign Language Structure: An outline of the Visual Communication System of the American Deaf*, Linstok Press.

Stokoe, W. C., Casterline, D. C. and Croneberg, C. G. (1976). *A Dictionary of American Sign Language on Linguistic Principles*, Linstok Press.

Wallin, L. (1990). Polymorphemic Predicates in Swedish Sign Language. In S. D. Fischer and P. Siple (eds) *Theoretical Issues in Sign Language Research*, Volume 1, 133-148. The University of Chicago Press.

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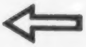
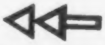
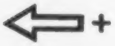
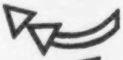
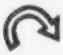
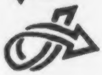
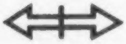
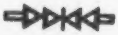
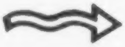
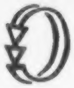
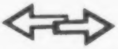
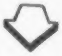
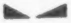
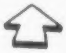
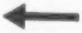
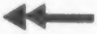
Key to Transcription Symbols

move once		move twice	
hold and move		curved movement, twice	
circular movement.		cross movement	
hands contact, move away from each other		hands contact and move twice	
move hands in direction of arrow		full circular movement twice	
hands move in opposite direction from each other		forward movement away from signer	
touch twice		movement towards signer	
fingers wiggle twice	((	fingers wiggle three times	(((
briskly open and close fingers		finger move once	
finger move twice		body contact	| (

➔	A thick arrow pointing to the right indicates that the fingers are not facing upward.
↓	An arrow pointing downward indicators that the palm is facing downward.
↑	An arrow pointing upward indicates that palm is facing upward.
CAPITAL	An English word in capital letters represents an ISL sign; this word is called a *gloss*.
WORD-WORD	When more than one English word is needed to gloss an ISL sign, the English words are separated by a hyphen.
(2h)	This symbol for 'two hands' is written before a gloss and means that the sign is made with two hands.

T,H,G	A capital letter represents a particular handshape. These particular capital letters represent handshapes of ISL and are different to the internationally used American Sign Linguistic symbols.
-CL	This symbol for *classifier* is written after the symbol for the handshape that is used in that classifier.
1	This symbol represents the handshape closed fist, index finger fully extended, sometimes known as the handshape 'd' when used in fingerspelling (spelling out English words).
5	This symbol represents the handshape open hand, all fingers fully extended.
:	This symbol indicates that the handshape is bent.
@	This symbol indicates a particular type of movement that is often used when giving something a spatial location. It is characterised by a certain tenseness and a 'hold' at the end of the movement.
rt ***lf*** ***cntr***	The symbol *'rt'* stands for 'right'; *'lf'* for 'left'; and *'cntr'* for 'centre'. When a sign is made in or toward a particular location in space, that place or direction is indicated after the gloss. When a symbol like *'rt'* is written before a gloss, it indicates the location where the sign began. The symbol *'cntr'* is only used when that space directly between the Signer and the Addressee represents a particular referent (person, place or thing). If none of these symbols appear, the sign is produced in neutral space.
'word.'	Single quotes around a lower case word or words is used to help describe the meaning of a classifier in the context of a particular sentence.
____________	A line proceeding from a gloss indicates the handshape of that sign is held in its location during the time period shown with the line.
outline	This symbol indicates that the handshape is used to 'outline' a particular shape.
t	This symbol indicates that both hands in the classifier move or act 'together' to describe the referent - i.e. both hands have equal value and there is no 'dominant' or 'passive' hand.

Review of Gabrielle Parker and Annie Rouxeville (eds). **'The Year Abroad': Preparation, Monitoring, Evaluation. Current Research and Development.** Published by the Association for French Language Studies (AFLS) in association with the Centre for Information on Language Teaching and Research (CILT) London, 1995.

***Riana Walsh**, Languages Department, Regional Technical College, Tallaght.*

This book consisting of twelve chapters begins with an introduction by the editors outlining the purpose of this volume: to heighten awareness amongst practitioners of current year abroad practice and research. It serves as an *état des lieux* providing examples of good practice from a variety of institutions in Britain, Ireland and France encouraging reflective, innovative practice with the aim of contributing towards the enhancement of the students' year abroad experience.

The first contribution by J. A. Coleman provides an informative and comprehensive survey of year abroad research undertaken to date which has language development as its focal point of interest. Coleman's survey summarises findings from an initial year abroad research project of the late 1960s through to the present day. It is an indispensable account for any practitioner considering undertaking year abroad research and provides an extensive list of references to work in the field. The European Language Proficiency Survey (ELPS) 1993-95 (published by CILT 1996) serves as a source for many of the statistics he provides in this contribution. Murphy-Lejeune addresses the paucity of theoretical and empirically based studies which focus on non-linguistic, cross-cultural aspects of the year abroad by examining the concept of 'the temporary stranger' in her contribution which examines three case study students during the year abroad. This cross-cultural dimension of the year abroad is continued in the subsequent contribution by Cormeraie who highlights the intrinsic relationship between the cultural, personal and linguistic dimensions of the year abroad experience. Her account is proof of the increasing trend towards a more strategic rather than ad hoc approach to pre-departure preparation. Her critical assessment of a pre-departure programme with an emphasis on cross-cultural training is followed by Jordan and Barro's account of how ethnographic training can contribute positively to the year abroad experience both culturally and linguistically. Their critical assessment of participant observation provides many examples illustrating 'living the ethnographic life'. Allison and Hintze deal with pre-departure preparation and critically examine both staff and student expectations of the year abroad. They look at the academic and personal issues associated with both work placement and university placement abroad. Dueñas-Tancred and Weber-Newth emphasise the necessity of perceiving the year abroad not purely in academic terms, the advantage of integrating the year abroad into the course and the importance of profiling (a method which enables the student develop an awareness of and keep account of personal skills developed) and accrediting. The endeavour to involve students more in the pre-departure process and to encourage student responsibility is also addressed by Convey. Admirably, this volume does not restrict its interests to study abroad - the contributions by Rider, Aldridge, Jamieson and Noreiko provide accounts of alternatives to the year abroad for students on a three year degree programme, a teacher training programme, assistantship preparation, au-pair placement and work placement. A further positive feature of this work is that Jamieson's forward-looking account provides details of a self-access computer-aided support program elaborated by the students themselves in response to the lack of resources available in electronic forms such as CD-ROM, e-mail and the Internet.

Many of the contributors to this volume emphasise the fact that the majority of year abroad studies conducted to date have tended to concentrate on linguistic outcomes rather than cross-cultural. If this is the case, it is a shortcoming of this volume that there is not one contribution which provides an account of empirical research with language development as its focal point of interest. The location of Coleman's survey of year abroad research at the beginning of this volume leads the reader to anticipate at least one contribution in the succeeding chapters serving as an example of good practice in linguistically based empirical research. Unfortunately, this expectation remains unfulfilled. I have reservations about the ordering of some of the contributions. For example, Jordan and Barro's contribution which provides a definition of ethnography and an excellent introduction to the method of participant observation might be best located as Chapter 2 in preparation for those contributions which describe cross-cultural research in rather technical terms. Similarly Allison and Hintze's contribution dealing with language and culture issues, university and work placement, outline *what* has to be done pre-departure and would be best placed in advance of Jordan and Barro who outline *how* innovative practice can be implemented.

Overall, this volume achieves a good balance between those contributions with an empirical basis and those which are based on good practice, without becoming anecdotal. Whilst some of the contributions provide information which is not entirely new or original to those readers involved in year abroad projects, the information is nonetheless well documented and structured. There is a generous supply of concrete examples and materials (e.g. sample questionnaires) and the suggestions made by contributors can be easily implemented, although at no time is the time-consuming nature and administrative load of year abroad practice under-rated by those documenting their procedures. There is a repeated call for a more systematic and answerable approach to the year abroad and the intrinsic link between quality assurance and funding so prevalent at the present time is addressed.

This all-encompassing account of year abroad theory and practice is long overdue and is a good indicator that year abroad research is a rapidly growing area of empirical research addressing interesting and relevant issues which have hitherto been neglected. It provides a valuable body of information of use to lecturers (both language and non-language), institutions and departments engaging in year abroad placement as well as the careers office and the students themselves.

Review of Diarmuid Ó Sé and Joseph Sheils, **Irish: A Complete Course for Beginners (Teach Yourself Series)**. Hodder & Stoughton, London, 1993. Pp. iv+316. ISBN 0 340 56490 3 (pbk.). Cassette also available.

***Thomas W. Ihde**, Bergen Community College, New Jersey*

This completely new version of Irish will be welcomed by language learners in Ireland and abroad. From the student living in an area where Irish language classes are not being offered to the experienced Irish student who would like to refresh his or her use of the language, Ó Sé and Sheils' publication is both colourful and exciting.

The text, composed of twenty chapters, presents the Irish language by way of the communicative approach. The functions taught in each chapter are clearly stated. Many learners of Irish wish to be able to communicate in the language at social gatherings (Ihde 1994, p. 97) and the book certainly addresses those needs by providing dialogues based on everyday interaction. Unlike Learning Irish (Ó Siadhail 1988) where the cassettes represented recordings of native speakers reading texts, the Irish tape is composed of lively interchanges that, though not all authentic, portray active language use.

Each chapter includes a dialogue section, a grammar section, a practice section, and a comprehension section. Activities involving the audio-tape can be found throughout the chapter. A key often follows the dialogue providing a bilingual lexicon. Questions after the dialogues are often Irish sentences to which the learner needs to answer true or false. Unlike the first teach yourself version of *Irish* (Dillon & Ó Cróinín 1961), which was developed using the grammar-translation approach, in the 1993 version of *Irish* the language learner is never asked to translate anything in the text. Oddly enough the student is asked to do so on the cassette tape.

The grammar sections are comprehensive for a beginner. However due to the fact that the text is broken into only twenty chapters, each grammar section contains as many as ten or more points. Although the student may need these to communicate more effectively, the large number of points in a chapter might be overwhelming. The practice sections are full of enjoyable activities. Many authentic texts have been included among which are maps with Irish-language placenames, brochures, newspaper advertisements, short magazine articles and newspaper notices. Activities include cloze, matching, re-ordering, and combining exercises.

The comprehension section, though not asking for translations, does initially often ask for an English-language reaction to something in Irish. The over-dependence throughout the text on English may be a concern to some. However, more Irish is used as the text progresses, especially in the directions for activities. One must keep in mind that this is a "teach yourself" book and is ideally meant for someone who does not have access to a teacher. Unfortunately no comparable text exists for adults learning Irish with a teacher, and as a result *Irish* will undoubtedly be used in some adult education programs where a communicative text is preferred.

In addition to the twenty chapters, Ó Sé and Sheils' *Irish* includes an introduction to the language, pronunciation guide, key to the exercises, Irish-English word list of about six hundred entries, and grammatical index. It is of interest to note that much of the introductory information in the 1961 version concerning dialects is not included in Ó Sé and Sheils' version. Although *An Caighdeán Oifigiúil* is taught in the 1993 version, where choices had to be made between semantically equivalent expressions, the authors tended to select Munster expressions (*Conas tá tú?*, *Cad is ainm duit?*, etc.), though other regional expressions can be occasionally found, for example, in some dialogues. However, the beginning student is not made aware of these choices. Also of interest is the fact that Ó Sé and Sheils do not make use of the International Phonetic Alphabet or even the modified version of IPA found in the bilingual pocket dictionary, *An Foclóir Póca* (An Roinn Oideachais 1986), which they recommend in their foreword.

The grammar index is a welcome addition. However the two pages devoted to this task could be expanded (see McLaughlin 1994). Also, it would be helpful if the reader were introduced to Irish language equivalents for grammar terms, since some students may eventually attend an immersion weekend or even a Gaeltacht course where intermediate students are expected to know expressions such as *aimsir fháistineach* and *réamhfhocal*.

In addition to teaching the language, the text also provides cultural information that is expressed by the language or has shaped the language. Unlike *Cogar* (ITÉ 1989), *Irish* does not presume knowledge of Irish-English vocabulary or Irish society. It also acknowledges the fact that many learners of the language live outside of Ireland through inclusion of dialogues and vocabulary representing that population.

In conclusion, this text represents an excellent addition to the Irish language learning material currently available and, with *Cogar* and *Cén*

Scéal? (Ní Dhorchaí 1989), adds to the growing number of communicative Irish language texts available.

References

Dillon, M. & Ó Cróinín, D. (1961). *Irish.* London: Hodder and Stoughton.

Ihde, T.W., (1994). "The Communicative Approach: Theory, Materials, and Assessment," in T.W. Ihde (ed.) *The Irish Language in the United States: a historical, sociolinguistic, and applied linguistic survey.* London: Bergin & Garvey, 94-114.

ITÉ, (1989). *Cogar*. Dublin: Institiúid Teangeolaíochta Éireann (ITÉ).

McLaughlin, M.C., (1994). "Indexing Irish grammars," *The Indexer* 19.2, 93-98.

Ní Dhorchaí, P. (ed.), (1989). *Cén Scéal?*. Dublin: Comhar na Múinteoirí Gaeilge.

Ó Siadhail, M. (1988). *Learning Irish.* Dublin: Dublin Institute for Advanced Studies, (1980) reprint, New Haven, CT: Yale University Press.

Roinn Oideachais, An (1986). *Foclóir Póca.* Dublin: An Gúm.

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Eolas Ginearálta

1. Foilsítear TEANGA: Bliainiris na Teangeolaíochta Feidhmí in Éirinn i mí an Mhárta gach bliain le teacht le Cruinniú Cinn Bhliana an Chumainn.

2. Caithfidh aon alt atá le foilsiú i dTEANGA a bheith ag an eagarthóir faoi 30 Meán Fómhair na bliana roimh dháta an fhoilsithe.

3. Is ceart don údar trí chóip dá alt a chur chuig: An tEagarthóir, TEANGA, 31 Plás Mhic Liam, Baile Átha Cliath 2. Bíodh an téacs san alt i spásáil dhúbailte agus ná téadh sé thar 4,000 focal. Bíodh imill 2.5 cm ar a laghad ar chlé, ag bun agus ag barr an ailt.

4. Is iondúil gur i nGaeilge nó i mBéarla a bhíonn na hailt.

5. Ordaíonn polasaí IRAAL go ndéanann beirt léitheoir gan aithne moltóireacht ar gach alt.

6. Cuirfear cóip de thuairisc na moltóirí chuig na húdair roimh 30 Samhain nó a luaithe ina dhiaidh sin agus is féidir, mar aon le cinneadh an bhoird eagarthóireachta faoi ghlacadh leis an alt.

7. Cé go ndéanfar gach iarracht ailt a nglactar leo a chur i gcló ní hionann glacadh le halt agus a rá go mbeidh sé sa chéad eagrán eile de TEANGA ach foilseofar iad san eagrán/sna heagráin dár gcionn.

8. Má ghlactar le halt, caithfidh na húdair an leagan deiridh dá gcuid alt a bheith i lámha an Eagarthóra acu faoin 15 Eanáir agus é clóscríofa de réir na gcoinbhinsean atá leagtha amach cheana féin agus a chuirfear ar fáil dóibh.

Submitting articles for publication in TEANGA

General Information

1. TEANGA: Blianiris na Teangeolaíochta Feidhmí in Éirinn/The Irish Yearbook of Applied Linguistics is published in March each year in order to coincide with IRAAL's AGM.

2. Articles to be considered for publication in TEANGA must reach the Editor by September 30 in the year preceding the publication date.

3. The author should submit three hard copies of his/her paper to: The Editor, TEANGA, 31 Fitzwilliam Place, Dublin 2. Papers should be double-spaced and should not exceed 4,000 words. Margins should be at least 2.5 cms at the left and top and bottom of the page.

4. Papers should normally be written in Irish or English.

5. IRAAL's policy dictates that all papers are refereed blind by two anonymous readers.

6. A copy of the reports from the two referees will be sent to the authors by November 30th or as soon as possible thereafter, together with the decision of the editorial board regarding acceptance.

7. While every effort will be made to publish papers, acceptance does not guarantee publication in the next issue of TEANGA, but will be included in subsequent editions.

8. If accepted, authors must submit the final version of their paper to the Editor by January 15th typed according to conventions already agreed and which will be conveyed to the authors.

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